A Preliminary List of the Leaf-roller Moths (Lepidoptera: Tortricidae) of Virginia

Winnie H.Y. Lam

Department of Biological Sciences CW 405 Biological Sciences Building University of Alberta Edmonton, Alberta, Canada T6G 2E9 (email: wnnelam@gmail.com)

Jadranka Rota¹

Department of Entomology National Museum of Natural History Smithsonian Institution Washington, DC 20013-7012, USA

John W. Brown²

Systematic Entomology Laboratory
U.S. Department of Agriculture, A.R.S.
National Museum of Natural History
P.O. Box 37012, MRC 168
Washington, DC 20013-7012, USA
(email: john.brown@ars.usda.gov)

ABSTRACT

The microlepidopteran fauna of Virginia is poorly documented. We present an annotated checklist of 301 species of leaf-roller moths (Lepidoptera: Tortricidae) recorded from the state based on the examination of 4,207 pinned specimens deposited in institutional or university collections; the specimen database from the Essig Museum of Entomology, University of California, Berkeley (122 specimen records); and literature records. County distribution, capture dates, and host plants are presented for each species. The geographic coverage of the material examined is highly uneven, with most specimens (60%) from Fairfax County (200 species). The poor state of knowledge of the Virginia tortricid fauna is demonstrated by the lack of records for nearly one-fifth of all counties and large independent cities. Much more collecting by both amateur and professional lepidopterists, as well as a review of additional existing collections, is needed before a general understanding of the geographic and temporal distribution of Virginia's tortricid fauna will begin to emerge.

Key words: biodiversity, distribution, faunal survey, host plants, microlepidoptera, phenology.

¹Current address: Department of Entomology, Natural History Museum of Denmark, University of Copenhagen, Copenhagen, Denmark; email: jrota@snm.ku.dk

²Author to whom to address correspondence

INTRODUCTION

Active management of natural lands has become an integral component of efforts focused on the long-term conservation of biological resources, especially those resources occurring in or near fragmented habitat, adjacent to development, or subject to direct and indirect anthropogenic impacts. However, before meaningful management strategies can be developed and implemented, it is essential to identify the constituents of the biodiversity to be conserved. Biotic inventories and faunal surveys represent the first step in that process.

The insect fauna of Virginia has received considerable attention over the last two decades with surveys of groups such as sawflies (Hymenoptera: Symphyta) (Smith, 2006), caddisflies (Trichoptera) (Flint et al., 2004, 2008, 2009), dragonflies and damselflies (Odonata) (e.g., Roble, 1994; Roble et al., 1997), mosquitoes (Diptera: Culicidae) (Harrison et al., 2002), robber flies (Diptera: Asilidae) (Bedell, 2010), true bugs (Heteroptera) (e.g., Hoffman, 1996, 2006), beetles (Coleoptera) (e.g., Anderson et al., 1995; Hoffman & Roble, 2000; Hoffman et al., 2002, 2006, 2009), and butterflies (Lepidoptera: Papilionoidea) (Chazal et al., 2004, 2010a, 2010b). In addition, several "bioblitzes" have provided "snapshot" views of the biota of specific parks (e.g., Evans, 2008). By comparison, the moth fauna of Virginia is poorly documented in the scientific literature. Recently published surveys of macromoths at selected sites in the state include those of Stein (1993), Butler et al. (2001), Steury et al. (2007), and Ludwig (2000, 2001, 2002, 2009). Roble et al. (1999) reported the recent arrival of an exotic noctuid in the state. Likewise, the microlepidopteran (smaller moths) fauna of Virginia remains little studied. There are a few older literature records of tortricids in Virginia such as those reported by Skinner (1921), Heinrich (1923, 1926), and Milne & Milne (1944); more recently, Wagner et al. (1995) reported on larval collections that included 36 species of tortricids. The purpose of this paper is to provide the first list of the tortricid fauna of Virginia as a foundation upon which to build our knowledge of their spatial and temporal distributions.

Tortricid moths (Lepidoptera: Tortricidae), commonly known as leaf-rollers, are one of the largest lineages of microlepidoptera (Kristensen, 1998; Brown, 2005). The common name "leaf-rollers" has been applied to the family owing to the larval habit of shelter-building by folding or rolling leaves of the food plant, but the larvae of tortricids employ a wide variety of feeding strategies, including gall-inducing, stem- and root-boring, fruit-boring, seed-predating, flower-

feeding, and leaf litter-feeding; a very few are predaceous on scale insects (Powell et al., 1998; Brown, 2005). Tortricid larvae feed on a wide array of plant families; members of the subfamily Tortricinae usually are polyphagous, whereas those of the subfamily Olethreutinae are more host-specific. Due to their plant-feeding habits, many tortricid species are important pests of agricultural, ornamental, and forest plants. In contrast, some highly localized or rare tortricids may require conservation efforts in order to persist in a changing landscape.

MATERIALS AND METHODS

Study Site

The Commonwealth of Virginia covers 110,784 km² and is situated along the mid-Atlantic seaboard of the eastern United States. Politically, the Commonwealth consists of 95 counties and 39 independent cities that are not included within a county; there are five former counties (i.e., no longer recognized as counties) that are now "county-sized" cities.

Virginia is topographically diverse, ranging from sea level along the coast to 1746 m (5729 ft) at Mount Rogers in the Appalachian Mountains, the latter of which form much of the western edge of the state. With five major physiographic provinces recognized within its borders, Virginia encompasses one of the most diverse landscapes in the East (Hoffman, 1969; Woodward & Hoffman, 1991). Its geographic position places it at the southern limit of many northern species and the northern limit of many southern species (DCR, 2009).

Data Sources

We databased specimens of tortricid moths from Lepidoptera collections at the National Museum of Natural History, Smithsonian Institution, Washington, D.C. (USNM), Virginia Polytechnic Institute and State University, Blacksburg (VT), Virginia Museum of Natural History, Martinsville (VMNH), and a sample of specimens from the Essig Museum of Entomology, University of California, Berkeley (EME). We also used the specimen database of the Essig Museum of Entomology (EMDB) for records of tortricids from Virginia. Recent collections made by staff of the Virginia Department of Conservation and Recreation, Division of Natural Heritage throughout the state also were studied, most of which are deposited in the USNM collection. Additional institutional acronyms include the following: AMNH (American Museum of Natural

History, New York, New York); CNC (Canadian National Collection of Insects, Ottawa, Ontario, Canada); FSCA (Florida State Collection of Arthropods, Gainesville, Florida); SNPC (Shenandoah National Park Collection, Luray, Virginia), and VDCR (Virginia Department of Conservation and Recreation, Division of Natural Heritage, Richmond, Virginia).

Each entry (record) in the database represents an individual specimen. The database includes the following fields: subfamily, tribe, genus, species, author, sex, county, locality, latitude, longitude, date(s) collected, collector(s), and additional notes. The database will be made available through the Virginia Department of Conservation and Recreation, Division of Natural Heritage.

We also extracted records of tortricids from several literature sources: Skinner (1921), Heinrich (1923, 1926), Milne & Milne (1944), Powell (1980), Stein (1993), and Wagner et al. (1995). In the Annotated Checklist, all county records are accompanied by their literature citation or the institution where the specimens are deposited.

Nomenclature

Nomenclature follows Brown (2005); tribes are assigned to subfamilies following Horak & Brown (1991) and Brown (2005); and per Horak (2006), Endotheniini is combined with Bactrini. Genera are arranged alphabetically within tribes, as are species within genera. Genera listed in quotes (i.e., "Cochylis") indicate that the associated species potentially require a different generic combination (or a new genus), but such has not been formally proposed. Common names are provided in brackets for those species for which one is recognized. A few of the species represent undescribed entities, and these are indicated by "n. sp."

Food Plant Data

Food plant information for each tortricid species was obtained from the database compiled by Brown et al. (2008), where original references for the data can be found. The data include records from throughout the range of each tortricid species, not just their range in Virginia. Family names for plant species follow GRIN (2010). For tortricids recorded from five or fewer hosts, all host species are listed. Where more than five species are recorded, the host plant families are listed followed by the number of host genera recorded for that plant family, e.g., "Asteraceae (6)" indicates that six genera of Asteraceae have been recorded. Host plant families are organized alphabetically.

Spatial Distribution

Specimen records from most independent cities, i.e., those not included within counties, were combined with those of the county that is geographically closest or that physically surrounds the respective city. For example, specimens from the independent cities of Falls Church and Alexandria were combined with those from Fairfax County, and specimens from the City of Richmond were combined with those from Henrico County. However, five of the independent cities are either former counties or encompass large areas; hence, they are treated like counties for purposes of presenting distribution records. These cities and their former county names (included in parentheses) are: City of Chesapeake (formerly Norfolk County; also includes the cities of Norfolk and Portsmouth for the purposes of this paper); City of Hampton (formerly Elizabeth City County); City of Newport News (formerly Warwick County); City of Suffolk (formerly Nansemond County); and City of Virginia Beach (formerly Princess Anne County). In the annotated checklist, county records are listed directly below the species heading; names of these five county-sized cities appear in italics. Specimens labeled only as "Virginia" are included, but detailed distribution data are unknown.

Temporal Distribution

In the annotated checklist, flight period, represented by the earliest and latest date of capture regardless of year, are provided immediately following the list of counties. For species represented by a single specimen, the date of capture of that specimen is given. In a few instances, an additional note is provided to explain the data. The collecting date is not present on the labels of several older specimens, and specific collecting dates are unknown for most of the species mentioned in the literature.

RESULTS AND DISCUSSION

We documented 301 species of Tortricidae from Virginia based on the examination of 4,207 pinned specimens, a review of the Essig Museum specimen database (122 specimen records), and a review of relevant literature. By comparison, Covell (1999) reported 348 species from Kentucky, and Glaser et al. (unpub. data) 319 species from Maryland. Although the documented species richness of tortricids in Virginia is lower than that reported for the adjacent states, based on area and topographic diversity, it is likely that species richness is higher in Virginia. Clearly, much additional sampling is required before a meaningful

estimate of the number of tortricid species in Virginia can be derived.

The number of species and specimens recorded for each county is listed in Table 1. The location and intensity of survey efforts combine to create an uneven and incomplete picture of species distributions for Virginia. Approximately 60% of all specimens examined (2,506 specimens) are from Fairfax County. The disproportionately large number of specimens from this county reflects not only the contemporary collecting efforts of a National Park Service inventory of George Washington Memorial Parkway National Park 2006–2009 (including Turkey Run and Great Falls parks) (n = 515 specimens), a survey by Paul Opler of his residence in Alexandria (Rose Hill) 1975-1977 (n = 638 specimens), and a survey by John Brown of his residence in Fairfax 1997–2010 (n = 541 specimens), but many older specimens collected by Carl Heinrich and August Busck (ca. 1915-1930) are from this county as well. The sampling effort in the rest of Virginia has been much less intensive to nonexistent. In fact, no tortricid has been recorded from 20 (20%) of the 100 current (n = 95) and former (n = 5; now large)independent cities) counties (Table 1, Fig. 1). Furthermore, the vast majority of Virginia's counties have fewer than 20 confirmed tortricid species, a figure often obtainable at any single locality in eastern North America. Twenty or more species are recorded from only 13 counties or cities, and 40 or more species are recorded from only six: Giles Co. (n = 40), Bath Co. (n = 41), Rockbridge Co. (n = 43), Montgomery Co. (n = 44), City of Virginia Beach (n = 53), and Fairfax Co. (n = 200). By comparison, George Washington Memorial Parkway National Park alone harbored 61 species, and the Fairfax County residences of Paul Opler and John Brown yielded 85 and 60 species, respectively. Also, Wagner et al. (1995) reported 36 species of tortricids from oaks and blueberry during spring larval sampling at a site in Rockbridge County.

Despite the geographic unevenness of the data, it is readily apparent that some species are widespread in Virginia. Among the most commonly recorded species are *Choristoneura rosaceana* (Harris) (29 counties), *Amorbia humerosana* Clemens (23), *Sparganothis sulfureana* (Clemens) (19), *Cydia latiferreana* (Walsingham) (18), *Ecdytolopha insiticiana* Zeller (18), and *Pandemis limitata* (Robinson) (17). Only 21 species are known from 10 or more counties, further demonstrating the inadequacy of sampling efforts to date. Furthermore, many species have been recorded from only one county (128) or from just one specimen (62). It is premature to attempt to evaluate which of these species actually have narrow distributions or are of potential conservation concern. For example, *Acleris*

maccana (Treitschke), Aethes atomosana (Busck), Argyrotaenia juglandana (Fernald), and Pseudogalleria inimicella (Zeller) are represented by one or few Virginia specimens, but they are common to abundant elsewhere. In contrast, Archips nigriplagana Franclemont, Lozotaenia exomilana Franclemont, Olethreutes monetiferana (Riley), and Pammene perstructana (Walker), with only single specimens from Virginia, are represented by exceedingly few specimens in the USNM collection in general, and may actually be rare species.

At least nine species documented from Virginia are unidentifiable to species-level and likely represent undescribed species. While some of these belong to poorly studied groups such as Cochylini, others are in genera (e.g., *Pseudexentera*) that have received contemporary revisionary attention (e.g., Miller, 1986; Cho, 1987).

The number of tortricid species in the adult stage (reflected by capture data) is lowest in January, with only a few records of Acleris species, many of which overwinter as adults. February records, likewise, are few and dominated by Acleris species, but by March a few spring-flying species (e.g., Pseudexentera) begin to appear. However, in some years, spring species are not encountered until April. Species richness increases dramatically through May, peaking in late May through early June, and slowly diminishes through mid-September (Fig. 2). Very few species fly as late as November, and December records, again, represent overwintering species of Acleris. Although sampling is less than thorough, the data (Appendix 1) confirm previously documented phenological patterns for most species (e.g., Covell, 1999; Gilligan et al., 2008). For example, spring-flying species such as members of the genus Pseudexentera were collected only from late March to late May (with one outlying record from mid-July), whereas multivoltine species such as Clepsis peritana (Clemens) and Endothenia hebesana (Walker) were captured from April through October. Several species show a univoltine fall-flying pattern: Eucosma dorsisignatana (Clemens) was captured from mid-August to late October and Phaneta autumnana (McDunnough) was captured from late September to early October. The year-round records of Rhyacionia frustrana (Scudder) reflect the fact that most of the specimens of this species were laboratory-reared, resulting in unusual times of emergence (i.e., January through late December).

Only seven species are represented by more than 100 specimens: *Clepsis peritana* (Clemens) (n = 302), *Choristoneura rosaceana* (n = 271), *Rhyacionia frustrana* (n = 181), *Argyrotaenia velutinana* (Walker) (n = 176), *Ecdytolopha insiticiana* (n = 139), *Amorbia*

Table 1. Number of species and specimen records by county or county-sized city (based on specimens examined; number of species with an asterisk [*] represents specimens examined plus species from the literature).

County	Species	Specimens	County	Species	Specimens
"Virginia"	25	92	Lancaster	4	4
Accomack	8	14	Lee	7	12
Albemarle	4	20	Loudoun	5	14
Alleghany	8	12	Louisa	0	0
Amelia	0	0	Lunenburg	0	0
Amherst	0	0	Madison	4	12
Appomattox	0	0	Mathews	1	4
Arlington	28	113	Mecklenburg	1	1
Augusta	8	38	Middlesex	1	1
Bath	41*	154	Montgomery	44	96
Bedford	11	42	Nelson	1	1
Bland	2	2	New Kent	5	9
Botetourt	9	11	Northampton	6	14
Brunswick	2	5	Northumberland	9	36
Buchanan	0	0	Nottoway	4	6
Buckingham	0	0	Orange	1	3
Campbell	0	0	Page	16	36
Caroline	29	62	Patrick	13	27
Carroll	2	2	Pittsylvania	0	0
Charles City	1	1	Powhatan	1	1
Charlotte	1	1	Prince Edward	0	0
Chesterfield	17	60	Prince George	4	7
Clarke	1	1	Prince William	20	40
Craig	2	2	Pulaski	3	3
Culpeper	1	1	Rappahannock	0	0
Cumberland	0	0	Richmond	1	1
Dickenson	9	21	Roanoke	6	12
Dinwiddie	3	6	Rockbridge	43*	12
Essex	1	1	Rockingham	18	41
Fairfax	200	2506	Russell	9	13
Fauquier	15	32	Scott	2	2
Floyd	37	81	Shenandoah	1	1
Fluvanna	0	0	Smyth	28	68
Franklin	5	6	Southampton	3	4
Frederick	8	9	Spotsylvania	0	0
Giles	40*	75	Stafford	4	4
Gloucester	0	0	Surry	1	1
Goochland	7	9	Sussex	1	1
Grayson	19	62	Tazewell	3*	2
Greene	1	1	Warren	0	0
Greensville	0	0	Washington	7	11
Halifax	3	5	Westmoreland	3	3
Hanover	34	54	Wise	5	7
Henrico	3	18	Wythe	0	0
Henry	1	1	York	2	2
Highland	9	10	Chesapeake	10	30
Isle of Wight	19	55	Hampton	4	8
James City	4	5	Newport News	0	0
King and Queen	8	25	Suffolk	21	63
King George	0	0	Virginia Beach	53	329
King George King William	3	22	virginia Beach	33	329
King william	3	22			

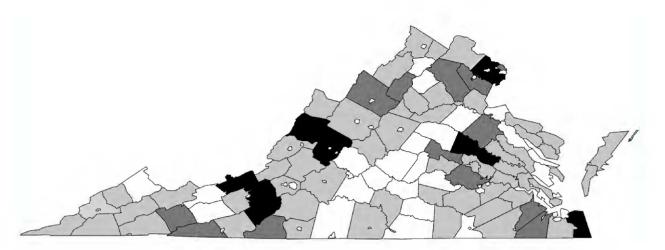


Fig. 1. Counties of Virginia categorized by documented species richness of Tortricidae (based on capture records): white = no recorded species; pale gray = 1-10 species; dark gray = 11-30 species; black = greater than 30 species.

humerosana (n = 121), and Platynota idaeusalis (Walker) (n = 117). Clepsis peritana, Choristoneura rosaceana, Amorbia humerosana, and Platynota idaeusalis are polyphagous species that occur not only in native habitats, but also are abundant in urban areas, e.g., Alexandria and Fairfax. Furthermore, these species have exceptionally long flight periods, with captures ranging from spring to fall. Ecdytolopha insiticiana also occurs in native and urban areas, where it is a pest of black locust (Robinia pseudoacacia L.; Fabaceae). However, it has a slightly shorter flight period, from late April to late August. In contrast, the explanation for the abundance of Rhyacionia frustrana is quite different. The vast majority of the specimens of this economically important pest species were reared from Pinus sp. by Heinrich and others from 1915 to 1929 in Fairfax County. An abundant species for which we have fewer collection records is the host-specific and univoltine Acleris curvalana (Kearfott), of which Wagner et al. (1995) recorded more than 600 larvae on blueberry (Vaccinium vacillans Torr.; Ericaceae) at their study site in Rockbridge County.

Archipini, the tribe with the greatest number of records (n = 1395), are represented by 10 genera and 37 species, with the majority of records from only four species: Clepsis peritana (n = 302), Choristoneura rosaceana (n = 271), Argyrotaenia velutinana (n = 176), and A. alisellana (n = 88). In contrast, Eucosmini, with the second most records (n = 791), are represented by more genera (n = 18) and species (n = 96) than any other tribe. Olethreutini show a relatively high diversity, with 12 genera and 44 species, based on many fewer records (n = 533). On the opposite end of

the spectrum, the tribe Euliini is represented by only two species, *Anopina ednana* (Kearfott) and *Eulia ministrana* L. Both of these are northern boreal elements that range south along the Appalachian Mountains as far as the Great Smoky Mountains of Tennessee. *Anopina ednana* has been recorded from British Columbia to Nova Scotia, Canada, south through eastern North America (Maine, Massachusetts, Connecticut, Rhode Island, New York, Pennsylvania, Virginia, and Tennessee). *Eulia ministrana* has a similar distribution but extends south into Oregon in the West. *Apotomops wellingtoniana* (Kearfott), which is expected in Virginia, also ranges from coast to coast in Canada, but occurs as far south as Arizona in the western United States and Tennessee in the East.

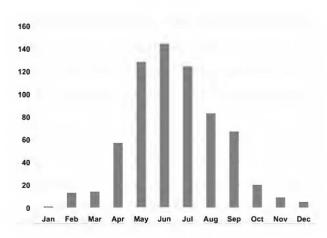


Fig. 2. Tortricid community phenology, i.e., cumulative number of species captured per month.

CONCLUSIONS

Virginia occupies a geographically unique position at the southern end of the range of many northern species, and northern edge of the range of many southern elements. Species such as Anopina ednana and Eulia ministrana are northern, boreal species that extend south through the Appalachian Mountains to Virginia and Tennessee. Niasoma metallicana (Walsingham), Coelostathma n. sp., Sparganothis (Cenopis) lamberti Franclemont, and Platynota rostrana (Walker) are southern species that reach their northern limits in Virginia or Maryland, Given this unique biogeographic position combined with a moderately diverse topography, one would expect the tortricid fauna of Virginia to exceed that of its surrounding states. However, the documented total number of species is low, indicating considerable undersampling.

Cumulative records from all sources provide uneven geographic and temporal distributions of most tortricid moths within Virginia. Additional sampling is needed in every county of the state; there are no records for one-fifth of Virginia's counties. In contrast, records from Fairfax County provide a relatively thorough inventory of that county. Although incomplete and preliminary, the current inventory represents a foundation upon which a more thorough assessment of the fauna can be built. We anticipate that many more species will be discovered within the Commonwealth. For example, many species documented from Maryland have yet to be found in Virginia, especially those associated with unusual or localized coastal habitats. In addition, the mountainous region along the western edge of the state deserves considerably more attention. Much more collecting by both amateur and professional lepidopterists, as well as a review of additional existing collections, is needed before a general understanding of the geographic and temporal distribution of Virginia's tortricid fauna will begin to emerge.

ANNOTATED CHECKLIST

TORTRICINAE: TORTRICINI

Acleris cervinana (Fernald)

Fairfax (EMDB), Floyd (USNM), Grayson (USNM), Hanover (USMN), Rockingham (USNM).

9 October to 16 April (overwinters as adult). Host Plants: Betulaceae: *Alnus* sp.,

Host Plants: Betulaceae: Alnus sp., Betula alleghaniensis Britton, and Corylus sp.

Acleris chalybeana (Fernald)

Fairfax (EMDB, USNM), Grayson (USNM), Hanover (USNM).

12 October to 23 April (probably overwinters as adult). Host Plants: Aceraceae (1), Betulaceae (2), and Fagaceae (2).

Acleris curvalana (Kearfott)

Caroline (USNM), Fairfax (EME, USNM), Giles (USNM), Page (EME), Prince William (USNM), Roanoke (EME), Rockbridge (Wagner et al., 1995). 27 May to 14 July.

Host Plants: Ericaceae (2), Fagaceae (1), and Rosaceae (1).

Acleris ferrugana [Denis and Schiffermüller]

Fairfax (USNM), "Virginia" (USNM).

10 February to 24 May (overwinters as adult).

Host Plants: Betulaceae (2), Fagaceae (2), Rosaceae (3), and Salicaceae (2).

Acleris flavivittana (Clemens)

Fairfax (EMDB, USNM), Floyd (USNM), Hanover (USNM).

27 September to 14 April (overwinters as adult).

Host Plants: Rosaceae: Malus pumila Mill. and Prunus pensylvanica L.

Acleris forbesana (McDunnough)

Fairfax (EMDB, USNM).

15 December to 25 March (overwinters as adult).

Host Plants: Cornaceae: *Cornus* sp., *C. californica* C. A. Mey, *C. sericea* subsp. *occidentalis* (Torr. & A. Gray) Fosberg, and *C. sericea* subsp. *stolonifera* (Michx.) Fosberg.

Acleris hastiana (L.)

Fairfax (EMDB, USNM).

13 February to 7 April (overwinters as adult).

Host Plants: Betulaceae (1), Ericaceae (3), Fagaceae (1), Myricaceae (1), Rhamnaceae (1), Rosaceae (1), and Salicaceae (2).

Acleris hudsoniana (Walker)

Floyd (USNM).

17 June.

Host Plants: Unknown.

Acleris kearfottana (McDunnough)

Fairfax (EMDB, USNM).

12 November to 13 February (overwinters as adult).

Host Plants: Hamamelidaceae: *Hamamelis* sp. Myrtaceae: *Comptonia peregrina* (L.) and *Myrica gale* L.

Acleris logiana placidana (Robinson)

Caroline (USNM), Fairfax (USNM), Floyd (USNM), Grayson (USNM).

13 October to 21 July (probably overwinters as adult). Host Plants: Betulaceae (2), Caprifoliaceae (1), and Rosaceae (1).

Acleris maccana (Treitschke)

Rockingham (USNM).

9 October to 24 April (overwinters as adult).

Host Plants: Betulaceae (2), Ericaceae (2), Grossulariaceae (1), Myricaceae (1), Rosaceae (2), and Salicaceae (2).

Acleris macdunnoughi Obraztsov

Smyth (USNM).

2-27 September.

Host Plants: Ericaceae: *Vaccinium* sp. Rosaceae: *Rubus* sp., *Spiraea alba* Du Roi. Salicaceae: *Salix* sp.

Acleris maculidorsana (Clemens)

Caroline (USNM), Chesterfield (USNM), Fairfax (USNM), Hanover (USNM), Rockbridge (Wagner et al., 1995).

12 February to 20 July (probably overwinters as adult). Host Plants: Clusiaceae: *Hypericum* sp. and *H. perforatum* L. Ericaceae: *Chamaedaphne calyculata* (L.), *Kalmia* sp., and *Vaccinium* sp.

Acleris minuta Robinson

[vellowheaded fireworm]

Isle of Wight (USNM), *Suffolk* (USNM). 10–24 May.

Host Plants: Ericaceae (3), Myricaceae (1), Rosaceae (3), and Salicaceae (1).

Acleris negundana (Busck)

Fairfax (USNM).

28 December to 23 July (overwinters as adult). Host Plants: Aceraceae: *Acer* sp. and *A. negundo* L.

Acleris nigrolinea (Robinson)

Bath (USNM).

18 August.

Host Plants: Betulaceae (1), Pinaceae (2), Rosaceae (1), and Salicaceae (2).

Acleris robinsoniana (Forbes)

Fairfax (EMDB, USNM).

13 February to 11 July.

Host Plants: Rosacaeae: *Rosa californica* Cham. & Schltdl. Salicaceae: *Populus tremuloides* Michx.

Acleris schalleriana viburnana (Clemens)

Fairfax (EMDB, USNM), Hanover (USNM).

1 October to 8 August (overwinters as adult).

Host Plants: Boraginaceae (1), Caprifoliaceae (1), Ericaceae (1), Rosaceae (2), and Salicaceae (1).

Acleris semiannula (Robinson)

Fairfax (USNM).

17 February (overwinters as adult).

Host Plants: Aceraceae: *Acer* sp., *A. rubrum* L., and *A. saccharinum* L.

Acleris semipurpurana (Kearfott)

[oak leaftier]

Arlington (USNM), Fairfax (EME, USNM), Giles (Milne & Milne, 1944), Isle of Wight (USNM), Montgomery (USNM), Prince William (USNM), Rockbridge (Wagner et al., 1995), Rockingham (USNM), Virginia Beach (USNM).

10 May to 23 July.

Host Plants: Fagaceae (1) and Rosaceae (1).

Acleris simpliciana (Walsingham)

Fairfax (EMDB).

29-30 May.

Host Plants: Unknown.

Acleris subnivana (Walker)

Rockbridge (Wagner et al., 1995).

Larval collections.

Host Plants: Asteraceae: Vernonia sp. Fagaceae: Quercus spp.

Acleris variana (Fernald)

Smyth (USNM).

2 September.

Host Plants: Cupressaceae (1), Pinaceae (6), Salicaceae (1).

Acleris n. sp. 1

Fairfax (USNM).

18 July.

Host Plants: Unknown.

Acleris n. sp. 2

Grayson (USNM).

13 October.

Host Plants: Unknown.

TORTRICINAE: CNEPHASIINI

Decodes basiplaganus (Walsingham)

Bath (USNM), Fairfax (EME, Powell, 1980),

Rockbridge (Wagner et al., 1995).

7-24 September.

Host Plants: Fagaceae: Quercus sp. and Q. lobata Nee.

TORTRICINAE: ARCHIPINI

Adoxophyes furcatana (Walker)

Bath (USNM), Fairfax (USNM), Suffolk (USNM). 21 May to 1 August.

Host Plants: Platanaceae: Platanus occidentalis L.

Archips argyrospila (Walker)

[fruittree leafroller]

Fairfax (EMDB), Giles (Milne & Milne, 1944), Rockbridge (Wagner et al., 1995), Rockingham (USNM).

1 June to 13 July (17 July; Milne & Milne, 1944).

Host Plants: Aceraceae (1), Anacardiaceae (2), Betulaceae (1), Caprifoliaceae (1), Cornaceae (1),

Ericaceae (5), Fabaceae (5), Fagaceae (1), Grossulariaceae (1), Hydrophyllaceae (1), Juglandaceae (2), Liliaceae (1), Myricaceae (1), Myrtaceae (1),

Oleaceae (1), Pinaceae (2), Platanaceae (1),

Rhamnaceae (2), Rosaceae (6), Rutaceae (1),

Salicaceae (2), Sapindaceae (1), Tiliaceae (1), Ulmaceae (1), and Vitaceae (1).

Archips cerasivorana (Fitch)

[uglynest caterpillar]

Smyth (USNM).

2 July.

Host Plants: Aceraceae (1), Betulaceae (3), Fagaceae (1), Oleaceae (1), Pinaceae (1), Rosaceae (4), Salicaceae (2), and Tiliaceae (1).

Archips fervidana (Clemens)

[oak webworm]

Augusta (USNM), Fairfax (USNM), Floyd (USNM), Giles (Milne & Milne, 1944; USNM), Grayson (USNM), Montgomery (USNM), Page (EMDB), Shenandoah (USNM).

14 June to 10 August.

Host Plants: Fagaceae (1), Juglandaceae (1), Rosaceae (1), and Salicaceae (1).

Archips grisea (Robinson)

Fairfax (EMDB, USNM), Giles (EMDB), Rockbridge (Wagner et al., 1995), Rockingham (USNM), *Suffolk* (USNM).

16 May to 3 July.

Host Plants: Asteraceae: *Rudbeckia* sp. Fagaceae: *Quercus* sp. Juglandaceae: *Carya* sp. Rosaceae: *Pyrus* sp.

Archips magnoliana (Fernald)

Fairfax (EMDB).

3 July.

Host Plants: Magnoliaceae: *Magnolia* sp. and *M. accuminata* L.

Archips nigriplagana Franclemont

Floyd (USNM).

20 June.

Host Plants: Unknown.

Archips purpurana (Clemens)

Bath (Skinner, 1921), Botetourt (USNM), Giles (Milne & Milne, 1944), Montgomery (USNM), Wise (USNM). 15 June to 29 July.

Host Plants: Anacardiaceae (1), Asteraceae (2), Betulaceae (1), Caprifoliaceae (1), Cornaceae (1), Crassulaceae (2), Ericaceae (1), Fagaceae (1), Geraniaceae (1), Grossulariaceae (1), Lauraceae (1), Liliaceae (1), Oleaceae (1), Rosaceae (4), Salicaceae (2), Tiliaceae (1), and Violaceae (1).

Archips rileyana (Grote)

Smyth (USNM).

11-14 July.

Host Plants: Asteraceae (1), Caprifoliaceae (1), Cornaceae (1), Fagaceae (1), Juglandaceae (2), Rosaceae (1), and Sapindaceae (1).

Archips semiferana (Walker)

[oak leafroller]

Fairfax (EMDB), Frederick (USNM), Giles (Milne & Milne, 1944), Page (EMDB), Rockbridge (Wagner et al., 1995).

20 June to 24 July.

Host Plants: Aceraceae (1), Fagaceae (1), Hamamelidaceae (1), Oleaceae (1), Polygonaceae (1), and Rosaceae (1).

Argyrotaenia alisellana (Robinson)

Alleghany (USNM), Bath (Skinner, 1921), Caroline (USNM), Fairfax (USNM), Giles (Milne & Milne, 1944; USNM), Hanover (USNM), Henrico (USNM), Highland (USNM), Isle of Wight (USNM), Montgomery (USNM, VMNH), Prince William (USNM), Rockbridge (Wagner et al., 1995).

16 May to 24 July.

Host Plants: Fagaceae: Quercus sp., Q. alba L., Q. macrocarpa Michx., and Q. velutina Lam.

Argyrotaenia floridana Obraztsov

Fairfax (USNM), Lancaster (USNM), Virginia Beach (USNM).

1 June to 18 September.

Host Plants: Unknown.

Argyrotaenia juglandana (Fernald)

[hickory leafroller]

Alleghany (USNM), Bath (USNM), Dickenson (USNM), Smyth (USNM).

5 June to 2 September.

Host Plants: Juglandaceae: Carya cordiformis (Wangenh.) K. Koch, C. ovata (Mill.) K. Koch.

Argyrotaenia mariana (Fernald)

[graybanded leafroller]

Alleghany (USNM), Augusta (USNM), Bath (USNM), Botetourt (USNM), Fairfax (USNM), Fauquier (USNM), Floyd (USNM), Frederick (USNM), Grayson (USNM), Hanover (USNM), Montgomery (USNM), Prince William (USNM), Rockbridge (Wagner et al., 1995), Smyth (USNM).

7 April to 15 July.

Host Plants: Aceraceae (1), Asteraceae (1), Betulaceae (2), Caprifoliaceae (1), Ericaceae (1), Fagaceae (1), Rosaceae (3), Salicaceae (2), and Ulmaceae (1).

Argyrotaenia occultana Freeman

Chesterfield (USNM).

9 April.

Host Plants: Pinaceae (4).

Argyrotaenia pinatubana Kearfott [pine tube moth]

Bath (USNM), Fairfax (USNM).

20 April to 20 July.

Host Plants: Cupressaceae (1) and Pinaceae (4).

Argyrotaenia quercifoliana (Fitch)

Alleghany (USNM), Arlington (USNM), Bath (USNM), Botetourt (USNM), Dickenson (USNM), Fairfax (EME, USNM), Fauquier (USNM), Giles (Milne & Milne, 1944), Highland (USNM), Lee (USNM), Montgomery (USNM), Roanoke (USNM), Rockbridge (Wagner et al., 1995), Rockingham (USNM), Stafford (USNM), Suffolk (USNM), Virginia Beach (USNM).

19 May to 12 September.

Host Plants: Aceraceae (1), Anacardicaceae (1), Apocynaceae (1), Fagaceae (1), Hamamelidaceae (1), Rhamnaceae (1), and Rosaceae (2).

Argyrotaenia tabulana Freeman

[jack pine tube moth]

Fairfax (USNM), Patrick (USNM), Virginia Beach (USNM).

11-12 May.

Host Plants: Pinaceae (5).

Argyrotaenia velutinana (Walker)

[redbanded leafroller]

Accomack (USNM), Albemarle (VT), Arlington (USNM), Bedford (USNM), Bland (USNM), Chesterfield (USNM), Fairfax (EME, USNM), Floyd (USNM), Hanover (USNM), James City (USNM), Lancaster (USNM), Middlesex (USNM), Montgomery (USNM, VT), Prince William (USNM), Rockbridge (Wagner et al., 1995), Smyth (USNM), Southampton (USNM), Suffolk (USNM), Washington (USNM).

5 March to 8 September.

Host Plants: Aceraceae (1), Apocynaceae (1), Aquifoliaceae (1), Asteraceae (4), Betulaceae (2), Campanulaceae (1), Caprifoliaceae (1), Chenopodiaceae (1), Ericaceae (1), Fagaceae (1), Geraniaceae (1), Malvaceae (1), Myricaceae (1), Orchidaceae (1), Pinaceae (5), Rosaceae (3), Salicaceae (2), Tiliaceae (1), Ulmaceae (1), and Violaceae (1).

Choristoneura fractivittana (Clemens)

Bath (USNM), Chesterfield (USNM), Fairfax (USNM), Fauquier (USNM), Hanover (USNM), Highland (USNM), Isle of Wight (USNM), Montgomery (VT), Rockbridge (Wagner et al., 1995), Suffolk (USNM), Tazewell (Stein, 1993), Virginia Beach (USNM). 7 May to 4 June.

Host Plants: Aceraceae (1), Betulaceae (1), Fagaceae (2), Rosaceae (2), and Ulmaceae (1).

Choristoneura fumiferana (Clemens)

[spruce budworm]

Fairfax (EMDB), Grayson (USNM), Washington (USNM).

30 June to 2 July.

Host Plants: Balsaminaceae (1), Cupressaceae (2), Pinaceae (6), and Salicaceae (1).

Choristoneura obsoletana (Walker)

Arlington (USNM), Caroline (USNM), Chesapeake (USNM), Fairfax (USNM), Fauquier (USNM), Hanover (USNM), Northumberland (EMDB, USNM, VT).

20 May to 6 September.

Host Plants: Annonaceae (1), Betulaceae (1), Ericaceae (2), Fabaceae (1), Rosaceae (3), and Typhaceae (1).

Choristoneura parallela (Robinson)

[spotted fireworm moth]

Accomack (USNM), Essex (USNM), Fairfax (USNM), Floyd (USNM), Halifax (USNM), Hanover (USNM), Lee (USNM), Mecklenburg (USNM), Montgomery (USNM), Prince William (USNM), Virginia Beach (USNM), Washington (VT).

7 May to 28 September.

Host Plants: Asteraceae (2), Clusiaceae (1), Ericaceae (3), Fabaceae (1), Myricaceae (1), Rosaceae (1), Rubiaceae (1), Rutaceae (1), Salicaceae (1), Sarraceniaceae (1), and Smilacaceae (1).

Choristoneura pinus Freeman

[jack pine budworm]

Botetourt (USNM), Fairfax (USNM), Floyd (USNM), Montgomery (VT), Roanoke (VT).

4 June to 2 August.

Host Plants: Pinaceae (4).

Choristoneura rosaceana (Harris) [obliquebanded leafroller]

Bath (Skinner, 1921), Botetourt (USNM), Brunswick (USNM), Caroline (USNM), Chesterfield (USNM), Dinwiddie (USNM), Fairfax (EMDB, EME, USNM), Fauquier (USNM), Frederick (USNM), Giles (Milne & Milne, 1944; USNM), Hanover (USNM, VMNH), Henrico (USNM), Isle of Wight (USNM), King and Queen (USNM), King William (USNM), Lee (USNM), Montgomery (USNM, VMNH), Northampton (USNM), Northumberland (USNM). Nottoway Powhatan (USNM), Prince George (USNM), Roanoke (USNM), Rockbridge (Wagner et al., Rockingham (USNM), Stafford (USNM), Suffolk (USNM), Sussex (USNM), Virginia Beach (USNM). 11 May to 3 October.

Host Plants: Aceraceae (1), Anacardiaceae (2), Asteraceae (4), Betulaceae (4), Calycanthaceae (1), Caprifoliaceae (3), Caryophyllaceae (1), Clusiaceae (1), Cornaceae (1), Ericaceae (3), Fabaceae (4), Fagaceae (1), Geraniaceae (1), Oleaceae (3), Pinaceae (4), Rhamnaceae (2), Rosaceae (8), Salicaceae (2), Santalaceae (1), Sapindaceae (1), Tiliaceae (1), Ulmaceae (2), and Verbenaceae (1).

Clepsis clemensiana (Fernald)

Floyd (USNM).

July-August.

Host Plants: Apocynaceae (1), Asteraceae (3), Poaceae (1), and Rosaceae (1).

Clepsis melaleucana (Walker)

Augusta (USNM), Bath (USNM), Dickenson (USNM), Fairfax (USNM), Floyd (USNM), Giles (Milne & Milne, 1944; USNM), Grayson (USNM), Hanover (USNM), Patrick (EME), Rockbridge (Wagner et al., 1995), Russell (USNM), Smyth (USNM), Tazewell (USNM).

9 May to 13 July.

Host Plants: Fabaceae: *Trillium grandiflorum* (Michx.) Salisb.

Clepsis peritana (Clemens)

Bath (Skinner, 1921), Bedford (USNM), Caroline (USNM), Chesterfield (USNM), Fairfax (EMDB, EME, USNM), Fauquier (USNM), Floyd (USNM), Giles (Milne & Milne, 1944), Isle of Wight (USNM), Northumberland (USNM), Rockbridge (EME), Rockingham (USNM), Smyth (USNM), Suffolk (USNM), Virginia Beach (USNM).

4 April to 25 October.

Host Plants: Asteraceae (3), Lamiaceae (1), Polyporaceae (1), Rosaceae (1), Rutaceae (1), Scrophulariaceae (1), and Solacaceae (1).

Clepsis persicana (Fitch)

[green needleworm]

Bath (USNM), Giles (Milne & Milne, 1944), Grayson (USNM), Highland (USNM), Smyth (USNM), Washington (USNM).

14-30 June (8 July; Milne & Milne, 1944).

Host Plants: Aceraceae (1), Apiaceae (1), Asteraceae (1), Betulaceae (3), Cornaceae (1), Ericaceae (1), Gentianaceae (1), Grossulariaceae (1), Liliaceae (1), Myricaceae (1), Oleaceae (1), Pinaceae (5), Rhamnaceae (1), Rosaceae (4), Salicaceae (2), and Ulmaceae (1).

Clepsis virescana (Clemens)

Augusta (USNM), Bath (USNM), Bedford (USNM), Fairfax (USNM), Giles (Milne & Milne, 1944; USNM), Goochland (EME), Grayson (USNM), Montgomery (USNM), Smyth (USNM), Washington (USNM), York (USNM).

17 May to 3 September.

Host Plants: Rosaceae: *Prunus virginiana* var. *demissa* (Nutt.) Torr.

Cudonigera houstonana (Grote)

[juniper budworm]

Accomack (USNM).

2 July.

Host Plants: Cupressaceae: *Juniperus* sp. and *J. californica* Carriere.

Lozotaenia exomilana Franclemont

Giles (USNM).

1 July.

Host Plants: Unknown.

Pandemis lamprosana (Robinson)

Caroline (USNM), Fairfax (USNM), Giles (USNM), Highland (VMNH), Rockbridge (Wagner et al., 1995). 26 May to 4 September.

Host Plants: Aceraceae (1), Betulaceae (2), Fabaceae

(1), Fagaceae (2), Hamamelidaceae (1), Lauraceae (1), Oleaceae (1), Platanaceae (1), Rosaceae (1), Salicaceae (1), Tiliaceae (1), Ulmaceae (1), and Urticaceae (1).

Pandemis limitata (Robinson)

[threelined leafroller]

Bath (USNM), Bedford (USNM), Botetourt (USNM), Chesterfield (USNM), Fairfax (USNM), Floyd (USNM), Hanover (USNM), Highland (USNM), Montgomery (USNM), Northampton (USNM), Patrick (USNM), Prince William (USNM), Rockbridge (Wagner et al., 1995), Rockingham (USNM), Smyth (USNM), Virginia Beach (USNM), York (USNM). 25 May to 22 September.

Host Plants: Aceraceae (1), Betulaceae (3),Caprifoliaceae (1), Celastraceae (1), Cornaceae (1), Ericaceae (1), Fabaceae (2), Fagaceae (2), Myricaceae (1), Osmundaceae (1), Rosaceae (3), Salicaceae (2), Tiliaceae (1), and Ulmaceae (1).

Syndemis afflictana (Walker)

Alleghany (USNM), Arlington (EMDB, USNM), Bath (USNM), Fairfax (USNM), Floyd (USNM), Montgomery (USNM, VT), Prince William (USNM), Russell (USNM).

3 April to 20 May.

Host Plants: Betulaceae (2), Cornaceae (1), Myricaceae (1), Pinaceae (4), Rosaceae (1), and Salicaceae (1).

Xenotemna pallorana (Robinson)

Loudoun (VMNH), Montgomery (USNM, VT), Prince William (USNM), Pulaski (USNM).

27 May to 30 August.

Host Plants: Asteraceae (4), Clusiaceae (1), Fabaceae (3), Lamiaceae (1), Pinaceae (2), Rosaceae (3), Santalaceae (1), Ulmaceae (1), and Verbenaceae (1).

TORTRICINAE: SPARGANOTHINI

Amorbia humerosana Clemens

[dusky leafroller]

Arlington (USNM), Augusta (USNM), Bath (USNM), Caroline (USNM), Chesterfield (USNM), Dickenson (USNM), Fairfax (EMDB, USNM), Fauguier (USNM), Floyd (USNM), Hanover (USNM), Isle of Wight (USNM), King and Queen (USNM), Lee (USNM), Montgomery (USNM), Northampton (USNM), Patrick (EMDB, USNM), Prince William (USNM), Russell (USNM), Scott (USNM), Smyth (USNM), Suffolk (USNM), Virginia Beach (USNM), Wise (USNM). 30 March to 17 July.

Host Plants: Asteraceae (1), Betulaceae (2),Caprifoliaceae (2), Cornaceae (1), Cupressaceae (1), Ericaceae (2), Fagaceae (1), Lauraceae (1), Myricaceae (1), Oleaceae (1), Pinaceae (5), Rosaceae (3), Salicaceae (2), Scrophulariaceae (1), and Ulmaceae (1).

Coelostathma discopunctana Clemens

Bath (USNM), Bedford (USNM), Brunswick (USNM), Chesterfield (USNM), Fairfax (USNM), Goochland Hanover (USNM), Madison (USNM), Montgomery (USNM), Smyth (USNM), Stafford (USNM).

10 May to 3 September.

Host Plants: Fabaceae: Desmodium sp. and Trifolium sp.

Coelostathma n. sp.

Caroline (USNM).

26 May.

Host Plants: Unknown.

Niasoma metallicana (Walsingham)

Virginia Beach (USNM).

17 August,

Host Plants: Unknown.

Platynota exasperatana (Zeller)

Chesterfield (USNM), Floyd (USNM), Giles (Milne & Milne, 1944; USNM), Rockbridge (Wagner et al., 1995), Virginia Beach (USNM).

11 May to 30 September.

Host Plants: Grasses and detritus (Wagner et al., 1995).

Platynota flavedana Clemens

Albemarle (VT), Augusta (VT), Caroline (USNM), Fairfax (EMDB, FSCA, USNM), Frederick (VT), Isle of Wight (USNM), James City (VT), Loudoun (USNM), Montgomery (VT), Northumberland (VT), Roanoke (VT), Suffolk (USNM), Virginia Beach (USNM).

6 May to 25 September.

Host Plants: Ericaceae: Rhododendron sp. Fabaceae: Trifolium sp. Lauraceae: Sassafras sp. Rosaceae: Rosa

Platynota idaeusalis (Walker)

[tufted apple bud moth]

Arlington (USNM), Bath (Skinner, 1921; USNM), Bedford (USNM), Chesterfield (USNM), Fairfax (EMDB, EME, USNM), Frederick (USNM), Goochland (EME), Grayson (USNM), King and Queen (USNM), Montgomery (USNM), Page (USNM), Patrick (USNM), Prince William (USNM), Virginia Beach (USNM), Westmoreland (USNM).

5 May to 24 September.

Host Plants: Asteraceae (1), Betulaceae (1), Caprifoliaceae (1), Cornaceae (1), Oleaceae (1), Pinaceae (1), Ranunculaceae (1), Rosaceae (3), Salicaceae (1), and Vitaceae (1).

Platynota rostrana (Walker)

Virginia Beach (USNM).

1 June to 8 September.

Host Plants: Amaranthaceae (1), Annonaceae (1), Asteraceae (7). Bromeliaceae (1). Caricaceae (1). Caryocaraceae (1), Erythroxylaceae (1), Euphorbiaceae (1), Fabaceae (9), Flacourtiaceae (1), Lauraceae (1), Malpighiaceae (2), Malvaceae (5), Moraceae (1), Myrsinaceae (2), Myrtaceae (2), Ochnaceae (1), Nyctaginaceae (1), Phytolacaceae (1), Pinaceae (1), Rubiaceae Rutaceae (1),(2),Sapotaceae (1),Solanaceae (2),Verbenaceae (2),and Vochysiaceae (2).

Platynota stultana Walsingham [omnivorous leafroller]

Fairfax (USNM), Montgomery (VMNH)

[apparently introduced in 1933 and again in 1970].

27 April to 20 November (all reared from greenhouse plants).

Host Plants: Amaranthanceae (1), Apiaceae (2), Asteraceae (10), Caryophyllaceae (1), Chenopodiaceae Convolvulaceae Crassulaceae (1),(1),Cupressaceae (1), Fabaceae (14), Ginkgoaceae (1), Juglandaceae (1), Lauraceae (1), Malvaceae (2), Onagraceae (1), Pinaceae (2), Poaceae (1),Polygonaceae (1), Portulaceae (1), Primulaceae (1), Punicaceae (1), Rosaceae (2), Rutaceae (1), Salicaceae (1), Solanaceae (2), Taxaceae (1), Verbenaceae (1), and Vitaceae (1).

Sparganothis (Cenopis) albicaudana Busck

Rockbridge (Wagner et al., 1995).

Larval collections.

Host Plants: Aceraceae: Acer sp. Fagaceae: Quercus spp.

Sparganothis (Cenopis) cana (Robinson)

Virginia Beach (USNM).

10 June.

Host Plants: Unknown.

Sparganothis (Cenopis) diluticostana (Walsingham)

Fairfax (USNM), Rockbridge (Wagner et al., 1995), Suffolk (USNM).

1 June to 3 July.

Host Plants: Apocynaceae (1), Betulaceae (1), Caprifoliaceae (1), Fagaceae (1), Oleaceae (1), and Rosaceae (1).

Sparganothis (Cenopis) directana (Walker)

[chokecherry leafroller]

Dinwiddie (USNM), Page (CNC, EME), Prince Willam (USNM), Rockbridge (Wagner et al., 1995), *Virginia Beach* (USNM), Wise (USNM).

10 June to 4 August.

Host Plants: Betulaceae (1), Ericaceae (1), Fabaceae (1), Fagaceae (1), Juglandaceae (1), Pinaceae (1), and Rosaceae (1).

Sparganothis (Cenopis) lamberti Franclemont

Isle of Wight (USNM), New Kent (USNM), Suffolk (USNM), Virginia Beach (USNM).

17 June to 28 August.

Host Plants: Unknown.

Sparganothis (Cenopis) pettitana (Robinson)

Chesapeake (USNM), Montgomery (USNM). Rockbridge (Wagner et al., 1995), Suffolk (USNM). 16 May to 30 June.

Host Plants: Aceraceae (1), Betulaceae (4), Fagaceae (1), Juglandaceae (1), Rosaceae (1), Salicaceae (1), Tiliaceae (1), and Ulmaceae (1).

Sparganothis (Cenopis) reticulatana (Clemens)

Bath (Skinner, 1921), Bedford (USNM), Caroline (USNM), *Chesapeake* (USNM), Chesterfield (USNM), Fairfax (EME, USNM), Fauquier (USNM), Floyd (USNM), Greene (USNM), Hanover (USNM), Highland (USNM), Prince William (USNM), Rockbridge (Wagner et al., 1995), *Virginia Beach* (USNM).

26 May to 3 September.

Host Plants: Aceraceae (1), Aquifoliaceae (1), Asteraceae (1), Betulaceae (3), Caprifoliaceae (1), Chenopodiaceae (1), Dryopteridaceae (1), Ebenaceae (1), Ericaceae (1), Fagaceae (2), Geraniaceae (1), Moraceae (1), Myricaceae (1), Oleaceae (1), Orchidaceae (1), Rosaceae (5), Salicaceae (1), and Vitaceae (1).

Sparganothis (Cenopis) saracana (Kearfott)

Page (EME).

24 July.

Host Plants: Lauraceae: Sassafras sp.

Sparganothis (Cenopis) n. sp.

Wise (USNM).

1 July.

Host Plants: Unknown.

Sparganothis (Sparganothis) bistriata Kearfott

Virginia Beach (USNM).

5 July to 8 September.

Host Plants: Unknown.

Sparganothis (Sparganothis) distincta (Walsingham)

Fairfax (USNM), Hanover (USNM), Northumberland (USNM).

10 June to 27 August.

Host Plants: Asteraceae: Solidago sp. and S. sempervirens L.

Sparganothis (Sparganothis) sulfureana (Clemens) [sulfur leafroller]

Accomack (USNM), Arlington (USNM), Bath (Skinner, 1921), Botetourt (USNM), Caroline (USNM), Chesapeake (USNM), Fairfax (EMDB, USNM), Fauquier (USNM), Floyd (USNM), Frederick (USNM), Giles (Milne & Milne, 1944; USNM), Isle of Wight (USNM), James City (USNM), Lancaster (USNM), Loudoun (USNM), Montgomery (AMNH, USNM, VMNH, VT), Rockingham (USNM), Suffolk (USNM), Virginia Beach (USNM).

26 May to 9 October.

Host Plants: Apiaceae (2), Asteraceae (6), Clusiaceae (1), Cupressaceae (1), Ericaceae (1), Fabaceae (5), Lamiaceae (2), Liliaceae (1), Onagraceae (1), Pinaceae (4), Poaceae (1), Ranunculaceae (1), Rosaceae (4), Rutaceae (1), Salicaceae (1), Santalaceae (1), Scrophulariaceae (1), Ulmaceae (1), Verbenaceae (1), and Vitaceae (1).

Sparganothis (Sparganothis) tristriata Kearfott Montgomery (USNM).

31 August.

Host Plants: Cupressaceae (1), Pinaceae (4), Rosaceae (2), and Saliaceae (1).

Sparganothis (Sparganothis) unifasciana (Clemens)

Alleghany (USNM), Highland (USNM), Montgomery (USNM), Pulaski (USNM), Rockbridge (Wagner et al., 1995).

8 June to 30 July.

Host Plants: Asteraceae (1), Ericaceae (1), Fabaceae (1), Fagaceae (1), Oleaceae (1), Pinaceae (2), Ranunculaceae (2), and Rosaceae (5).

Sparganothis (Sparganothis) violaceana (Robinson) Giles (USNM).

14-21 June.

Host Plants: Unknown.

Sparganothis (Sparganothis) xanthoides (Walker)

Floyd (USNM), Franklin (USNM), Giles (Milne & Milne, 1944), Hanover (USNM), Montgomery (USNM), Page (CNC, EMDB), Smyth (USNM). 20 June to 8 August.

Host Plants: Rosaceae: *Holodiscus discolor* (Pursh) Maxim.

Sparganothoides lentiginosana (Walsingham)

Fairfax (EME, USNM), Virginia Beach (USNM).

10 June to 5 October.

Host Plants: Asteraceae: *Achillea millefolium* L. (in the laboratory).

TORTRICINAE: EULIINI

Anopina ednana (Kearfott)

Giles (USNM), Madison (USNM).

3 July to 12 August.

Host Plants: Betulaceae: Betula populifolia Marshall.

Eulia ministrana L.

Grayson (USNM, VDCR), Page (SNPC).

2–6 June (May to June elsewhere).

Host Plants: Betulaceae (3), Caprifoliaceae (1), Ericaceae (1), Fagaceae (2), Oleaceae (1), Onagraceae (1), Rhamnaceae (2), Rosaceae (4), Salicaceae (1), and Tiliaceae (1).

TORTRICINAE: COCHYLINI

Aethes angustana (Clemens)

Bedford (USNM), Fairfax (USNM), Grayson (USNM), Stafford (USNM).

31 May to 13 October.

Host Plants: Unknown; possibly Asteraceae.

Aethes argentilimitana (Robinson)

Caroline (USNM), Fairfax (USNM).

20 May to 4 September.

Host Plants: Unknown; possibly Asteraceae.

Aethes atomosana (Busck)

Floyd (USNM).

12 September.

Host Plants: Unknown; possibly Asteraceae.

Aethes floccosana (Walker)

Smyth (USNM).

30 June.

Host Plants: Unknown; possibly Asteraceae.

Aethes interruptofasciata (Robinson)

Fairfax (USNM).

28-31 May.

Host Plants: Unknown; possibly Asteraceae.

Aethes promptana (Robinson)

Fairfax (USNM). 2 September.

Host Plants: Unknown; possibly Asteraceae.

Aethes sexdentata Sabourin & Miller

Fairfax (USNM).

30 June.

Host Plants: Unknown; possibly Asteraceae.

Aethes n. sp. 1

Fairfax (USNM), Franklin (USNM).

30 June to 23 August.

Host Plants: Unknown; possibly Asteraceae.

Aethes n. sp. 2

Bedford (USNM), Fairfax (USNM).

26 May to 20 August.

Host Plants: Unknown; possibly Asteraceae.

Carolella bimaculnaa (Robinson)

Fairfax (USNM).

4 September.

Host Plants: Unknown.

Carolella sartana (Hübner)

Caroline (USNM), Hanover (USNM), Isle of Wight (USNM), Prince George (USNM).

14 June to 8 August. Host Plants: Unknown.

"Cochylis" aurorana (Kearfott)

Fairfax (USNM). 8 September.

Host Plants: Unknown.

"Cochylis" hoffmanana (Kearfott)

Bland (USNM), Craig (USNM), Fairfax (USNM).

16 April to 13 August.

Host Plants: Asteraceae: Symphyotrichum novae-angeliae (L.) G. L. Nesom.

"Cochylis" oenotherana (Riley)

Virginia Beach (USNM).

7 September.

Host Plants: Onagraceae: Oenothera sp.

"Cochylis" temerana (Busck)

Fairfax (EMDB, USNM).

15-18 April.

Host Plants: Unknown.

Henricus contrastana (Kearfott)

Fairfax (USNM), Virginia Beach (USNM).

9-13 June.

Host Plants: Cupressaceae: Juniperus sp. Fagaceae:

Quercus lobata.

Phalonidia lepidana (Clemens)

Fairfax (USNM).

28 May.

Host Plants: Unknown.

Phtheochroa riscana (Kearfott)

Fairfax (USNM), Floyd (USNM).

13 June to 30 August.

Host Plants: Probably Asteraceae.

Phtheochroa terminana (Busck)

Alleghany (USNM), Bath (USNM), Bedford (USNM), Carroll (USNM), Fauquier (USNM), Floyd (USNM), Lee (USNM), Montgomery (USNM), Prince William (USNM), Russell (USNM), Scott (USNM).

8 June to 16 September.

Host Plants: Asteraceae: Verbasina alternifolia (L.)

Britton ex Kearney.

Platphalonidia nr. felix (Walsingham)

Fairfax (USNM).

24 July to 21 August.

Host Plants: Asteraceae: Senecio blochmaniae E.

Greene and S. douglasii DC.

Rudenia leguminana (Busck)

Fairfax (USNM).

3 May to 28 August.

Host Plants: Fabaceae (7).

Thyraylia n. sp.

Fairfax (USNM).

Collecting dates illegible.

Host Plants: Unknown.

OLETHREUTINAE: BACTRINI

Bactra furfurana (Haworth)

Fairfax (USNM, EMDB).

11 June to 30 August.

Host Plants: Cyperaceae (2) and Juncaceae (1).

Bactra maiorina Heinrich

Arlington (USNM), Fairfax (USNM).

9 June.

Host Plants: Cyperaceae: Bolboschoenus fluviatilis

(Torr.) Sojak and Scirpus sp.

Bactra verutana Zeller

Fairfax (USNM), Virginia Beach (USNM).

11 June to 9 November.

Host Plants: Cyperaceae (2) and Juncaceae (1).

Endothenia hebesana (Walker)

[verbena bud moth]

Bath (Skinner, 1921; USNM), Caroline (USNM), Chesapeake (USNM), Fairfax (USNM), Floyd (USNM), Giles (Milne & Milne, 1944), Hanover (USNM), Montgomery (USNM), Page (EMDB), Patrick (USNM), Smyth (USNM), Virginia Beach (USNM).

19 April to 24 September.

Host Plants: Asteraceae (1), Anacardiaceae (1), Betulaceae (1), Gentianaceae (1), Iridaceae (1), Lamiaceae (3), Ranunculaceae (1), Sarraceniaceae (1), Scrophulariaceae (7), and Verbenaceae (1).

Endothenia montanana (Kearfott)

Fairfax (EME).

27-28 June.

Host Plants: Lamiaceae: Stachys sp.

Endothenia nubilana (Clemens)

Fairfax (EME, USNM).

23 August to 21 September.

Host Plants: Boraginaceae: *Symphytum* sp. Lamiaceae: *Menthas* sp., *Stachys* sp., and *Teucrium canadense* L.

Hulda impudens (Walsingham)

Bath (USNM), Fairfax (EMDB, USNM), Giles (Milne & Milne, 1944; USNM), Grayson (USNM), Madison (USNM), Rockingham (USNM), Smyth (USNM), Suffolk (USNM).

30 May to 2 September.

Host Plants: Unknown.

OLETHREUTINAE: OLETHREUTINI

Celypha cespitana (Hübner)

Fairfax (EME, USNM), Rockbridge (EME), Rockingham (USNM), *Suffolk* (USNM).

15 May to 23 September.

Host Plants: Ericaceae (1), Fabaceae (2), Fagaceae (1), Lamiaceae (1), Pinaceae (1), Plumbaginaceae (2), Poaceae (1), Rosaceae (1), and Salicaceae (1).

Episimus argutanus (Clemens)

Arlington (USNM), Fairfax (EMDB, USNM), Giles (Milne & Milne, 1944), Rockbridge (USNM), Westmoreland (USNM).

22 May to 21 September.

Host Plants: Anacardiaceae (2), Asteraceae (2), Betulaceae (1), Caprifoliaceae (1), Cornaceae (1), Ericaceae (1), Euphorbiaceae (1), Hamamelidaceae (1), Rosaceae (1), and Ulmaceae (1).

Episimus tyrius Heinrich

Fairfax (EME, USNM), Virginia Beach (USNM).

26 May to 27 July.

Host Plants: Aceraceae (1), Aquifoliaceae (1), Magnoliaceae (1), Myricaceae (1), Rosaceae (1), and Theaceae (1).

Eumarozia malachitana (Zeller)

Chesterfield (USNM), Fairfax (EME, USNM), Goochland (EME), Northampton (USNM), Northumberland (USNM), *Virginia Beach* (USNM). 29 June to 7 October.

Host Plants: Amaranthaceae (1), Betulaceae (1), Cornaceae (1), Ebenaceae (1), Fabaceae (1), and Rosaceae (1).

Hedya chionosema (Zeller)

[twinspotted budworm]

Fairfax (USNM), Floyd (USNM), Frederick (USNM). 30 April to 1 July.

Host Plants: Fagaceae (1) and Rosaceae (5).

Hedva cyanana (Murtfeldt)

Chesapeake (USNM), Fairfax (USNM), Hampton (USNM), King and Queen (USNM).

16 May to 11 August.

Host Plants: Asteraceae: Cirsium sp.

Hedya ochroleucana (Frölich)

Fairfax (USNM).

29 June.

Host Plants: Rosaceae: *Malus* sp., *Pyrus communis* L., *Rosa* sp., and *Sorbus* sp.

Metendothenia separatana (Kearfott)

Virginia Beach (USNM).

3 August.

Host Plants: Betulaceae (1), Ranunculaceae (1), and Rosaceae (4).

Olethreutes appendiceum (Zeller)

Fairfax (EME), Rockbridge (Wagner et al., 1995), Rockingham (USNM), Russell (USNM), Virginia Beach (USNM).

23 May to 17 July.

Host Plants: Aceraceae (1), Anacardiaceae (1), Betulaceae (3), Ericaceae (1), Fagaceae (2), Grossulariaceae (1), Rosaceae (2), and Salicaceae (2).

Olethreutes astrologana (Zeller)

Fairfax (EME, USNM), Rockbridge (EMDB), Smyth (USNM).

30 May to 30 June. Host Plants: Unknown.

Olethreutes atrodentana (Fernald)

Rockbridge (Wagner et al., 1995).

Larval collections.

Host Plants: Fagaceae: Quercus spp.

Olethreutes auricapitana (Walsingham)

Fairfax (USNM).

12 June,

Host Plants: Betulaceae: *Betula* sp. and *B. alleghaniensis* Britton. Dryopteridaceae: *Matteuccia struthiopteris* (L.) Tod.

Olethreutes bipartitana (Clemens)

Bath (USNM), Highland (USNM).

18 May to 11 August.

Host Plants: Apiaceae: Apium graveolens L. and Spermolepis sp.

Olethreutes brunneopurpurata (Heinrich)

Caroline (USNM), Fairfax (USNM).

20 July.

Host Plants: Betulaceae: Alnus sp.

Olethreutes concinnana (Clemens)

Fairfax (USNM), Floyd (USNM).

3 June to 21 July.

Host Plants: Rosaceae: Rubus sp.

Olethreutes coruscana (Clemens)

Arlington (USNM), Fairfax (EME, USNM), Isle of Wight (USNM), Montgomery (USNM), Rockbridge (EME).

7 May to 30 June.

Host Plants: Unknown.

Olethreutes corylana (Fernald)

Nottoway (USNM).

16 May.

Host Plants: Betulaceae: Corylus sp. and C. americana Marshall.

Olethreutes fasciatana (Clemens)

Arlington (USNM), Bath (USNM), Dickenson (USNM), Fairfax (EMDB, USNM), Giles (USNM), Highland (USNM), Page (EME), Prince William (USNM), Rockingham (USNM), Smyth (USNM), Suffolk (USNM), Virginia Beach (USNM).

25 May to 23 July.

Host Plants: Salicaceae: *Populus* sp., *P. balsamifera* L., *P. tremuloides* Michx., and *Salix* sp.

Olethreutes ferriferana (Walker)

Arlington (USNM), Fairfax (USNM).

25 May to 12 June.

Host Plants: Hydrangaceae: Hydrangea sp.

Olethreutes ferrolineana (Walker)

Franklin (USNM), Highland (USNM), Montgomery (VT).

27 May to 6 June.

Host Plants: Unknown.

Olethreutes footiana (Fernald)

Halifax (USNM).

26 June (emergence date).

Host Plants: Fagaceae: *Quercus* sp. Hamamelidaceae: *Hamamelis* sp. and *H. virginiana* L.

Olethreutes glaciana (Möschler)

Highland (USNM).

6 June.

Host Plants: Aceraceae (1), Betulaceae (1), Rosaceae (1), and Salicaceae (2).

Olethreutes griseoalbana (Walsingham)

Fairfax (USNM), Virginia Beach (USNM).

1 June to 16 September.

Host Plants: Unknown.

Olethreutes hamameliana (McDunnough)

Fauquier (USNM), Montgomery (USNM), Russell (USNM).

23 May to 10 June.

Host Plants: Hamamelidaceae: *Hamamelis* sp. and *H. virginiana* L.

Olethreutes inornatana (Clemens)

Arlington (USNM), Bath (Skinner, 1921), Clarke (USNM), Culpeper (USNM), Hanover (USNM), Smyth (USNM).

7 July to 18 August.

Host Plants: Clethraceae (1), Cornaceae (1), Fagaceae (1), Juglandaceae (1), and Rosaceae (1).

Olethreutes lacunana (Freeman)

Rockbridge (Wagner et al., 1995).

Larval collections.

Host Plants: Ericaceae: Vaccinium sp.

Olethreutes merrickanum (Kearfott)

Page (USNM).

6 July.

Host Plants: Betulaceae: Ostrya sp. and O. virginiana

(Mill.) K. Koch. Juglandaceae: Carya sp.

Olethreutes monetiferana (Riley)

Lee (USNM).

25 May.

Host Plants: Sapindaceae: Aesculus flava Willd.

Olethreutes nitidana (Clemens)

Floyd (USNM).

5 July.

Host Plants: Aceraceae: Acer sp.

Olethreutes olivaceana (Fernald)

Fairfax (USNM), Grayson (USNM).

29 May to 4 September.

Host Plants: Betulaceae: *Corylus* sp. Rosaceae: *Fragaria* sp.

Olethreutes osmundana (Fernald)

Caroline (USNM).

20 July.

Host Plants: Asteraceae: *Ambrosia trifida* L. Osmundaceae: *Osmunda cinnamomea* L. and *O. regalis* L. Polypodiaceae: *Pteridium aquilinum* (L.) Kuhn.

Olethreutes permundana (Clemens)

Fairfax (USNM), Page (EME), Rockingham (USNM), Suffolk (USNM).

1 June to 8 August.

Host Plants: Anacardiaceae (1), Betulaceae (1), Ericaceae (1), Jugladaceae (1), Myricaceae (1), and Rosaceae (4).

Olethreutes troglodana (McDunnough)

Dickenson (USNM), Fairfax (USNM).

4-13 June.

Host Plants: Unknown.

Orthotaenia undulana [Denis and Schiffermüller] Giles (USNM).

14-21 June.

Host Plants: Aceraceae (1), Asteraceae (1), Betulaceae (2), Caprifoliaceae (1), Chenopodiaceae (1), Cornaceae (1), Ericaceae (1), Fagaceae (1), Grossulariaceae (1), Lamiaceae (2), Myricaceae (1), Oleaceae (1), Onagraceae (1), Pinaceae (1), Rosaceae (4), Salicaeae (1), and Urticaceae (1).

Paralobesia liriodendrana (Kearfott)

Fairfax (EME, USNM), Floyd (USNM), Patrick (USNM).

17 May to 26 August.

Host Plants: Magnoliaceae: *Liriodendron tulipifera* L., *Magnolia* sp., *M. grandiflora* L., and *M. virginiana* L.

Paralobesia piceana (Freeman)

Fairfax (USNM).

3 September.

Host Plants: Pinaceae (5).

Paralobesia rhoifructana (Kearfott)

Fairfax (USNM).

7 July to 1 August.

Host Plants: Anacardiaceae (1), Asteraceae (1), Cornaceae (1), and Ericaceae (1).

Paralobesia spiraeifoliana (Heinrich)

Fairfax (USNM).

18 April to 28 May.

Host Plants: Rosaceae: Spiraea salicifolia L.

Paralobesia viteana (Clemens)

[grape berry moth]

Fairfax (USNM), Nelson (USNM).

26 May to 13 June.

Host Plants: Fabaceae (1), Lauraceae (1), Rosaceae (1), and Vitaceae (1).

Paralobesia yaracana (Kearfott)

Fairfax (USNM).

13 June to 23 July.

Host Plants: Unknown.

Phaecasiophora confixana (Walker)

Caroline (USNM), Dickenson (USNM), Fairfax (USNM), Fauquier (UNM), Prince George (USNM), *Suffolk* (USNM).

20 May to 8 August.

Host Plants: Unknown.

Phaecasiophora niveiguttana Grote

Bath (USNM), *Chesapeake* (USNM), Fairfax (EME, USNM), Fauquier (USNM), Goochland (EME), Hanover (USNM), Isle of Wight (USNM), King and Queen (USNM), Page (EME), Patrick (EME), *Suffolk* (USNM), *Virginia Beach* (USNM).

20 May to 21 August.

Host Plants: Hamamelidaceae: *Hamamelis* sp. and *H. virginiana* L. Lauraceae: *Sassafras* sp. and *S. albidum* (Nutt.) Nees.

Pristerognatha agilana (Clemens)

Fairfax (USNM), Highland (USNM).

18-28 May.

Host Plants: Balsaminaceae: *Impatiens* sp. and *I. capensis* Meerb.

Zomaria interruptolineana (Fernald)

Fairfax (USNM), New Kent (USNM), Patrick (USNM),

Virginia Beach (USNM). 21 April to 7 September.

Host Plants: Ericaceae (4) and Sapotaceae (1).

OLETHREUTINAE: ENARMONIINI

Ancylis burgessiana (Zeller)

Bath (USNM), Fairfax (USNM).

18 May.

Host Plants: Betulaceae (1), Fagaceae (3), and Rosaceae (2).

Ancylis carbonana Heinrich

Giles (USNM).

14 June.

Host Plants: Unknown.

Ancylis comptana (Frölich)

[strawberry leafroller]

Arlington (USNM), Fairfax (USNM), New Kent (USNM).

28 April to 3 August.

Host Plants: Asteraceae (1), Ericaceae (1), Lamiaceae (2), and Rosaceae (7).

Ancylis discigerana (Walker)

Giles (USNM), Smyth (USNM).

23 May to 14 June.

Host Plants: Betulaceae: *Betula alleghaniensis* Britton and *B. papyrifera* Marshall. Salicaceae: *Populus tremuloides* Michx.

Ancylis divisana (Walker)

Fairfax (USNM), Goochland (EME), Rockbridge (Wagner et al., 1995).

28 May to 5 September.

Host Plants: Betulaceae: *Carpinus* sp. Fagaceae: *Castanea dentata* (Marshall) Borkh. Platanaceae: *Platanus* sp. and *P. occidentalis* L.

Ancylis fuscociliana (Clemens)

Giles (USNM).

14 June.

Host Plants: Unknown.

Ancylis geminana (Donovan)

Grayson (USNM).

2 May.

Host Plants: Salicaceae: *Salix* sp., *S. atrocinerea* Brot., *S. aurita* L., and *S. repens* L.

Ancylis goodelliana (Fernald)

Giles (USNM).

14 June.

Host Plants: Unknown.

Ancylis laciniana (Zeller)

Chesterfield (USNM), Fairfax (USNM), Giles (Milne & Milne, 1944; USNM).

11 May to 14 June (21 July; Milne & Milne, 1944).

Host Plants: Betulaceae: Ostrya virginiana (Mill.) K.

Koch. Fagaceae: Quercus alba L.

Ancylis metamelana (Walker)

Fairfax (EMDB, USNM).

8 May to 21 September.

Host Plants: Fabaceae: *Trifolium hybridium* L., *T. pratense* L., and *T. repens* L.

Ancylis muricana (Walsingham)

Fairfax (USNM).

20 May to 21 July.

Host Plants: Betulaceae: *Betula* sp. Cornaceae: *Cornus* sp. and *C. racemosa* Lam. Rosaceae: *Fragaria* sp. and *Rubus* sp.

Ancylis nubeculana (Clemens)

Augusta (USNM), Grayson (USNM).

2-25 May.

Host Plants: Rosaceae (5).

Ancylis platanana (Clemens)

Bath (USNM), Carroll (USNM), Fairfax (EMDB, USNM).

23 April to 12 September.

Host Plants: Platanaceae: *Platanus* sp. and *P. occidentalis* L.

Ancylis semiovana (Zeller)

Fairfax (USNM).

17 June.

Host Plants: Rhamnaceae: Cayoides crispum (L.), Ceanothus sp., and C. americana L.

Ancylis subaequana (Zeller)

Giles (USNM).

14 June.

Host Plants: Unknown.

OLETHREUTINAE: EUCOSMINI

Catastega aceriella Clemens [maple trumpet skeletonizer]

Fairfax (EMDB, EME, USNM).

14 June to 2 July.

Host Plants: Aceraceae (1), Fagaceae (1), and Rosaceae (1).

Catastega timidella Clemens

Patrick (EMDB).

3 June.

Host Plants: Betulaceae (1), Fagaceae (1), and Juglandaceae (1).

Chimoptesis gerulae (Heinrich)

Fairfax (USNM). 27 February.

Host Plants: Unknown.

Chimoptesis pennsylvaniana (Kearfott)

Rockbridge (Wagner et al., 1995).

Larval collections.

Host Plants: Fagaceae: Quercus spp.

Epiblema boxcana (Kearfott)

Fairfax (USNM).

15 May.

Host Plants: Unknown.

Epiblema brightonana (Kearfott)

Fairfax (EME), Grayson (USNM), Hanover (USNM), Montgomery (USNM).

10 June to 7 August.

Host Plants: Unknown.

Epiblema carolinana (Walsingham)

Fairfax (USNM), Lee (USNM), Patrick (USNM).

21-24 August.

Host Plants: Asteraceae: Rudbeckia sp. and R. laciniata

L.

Epiblema desertana (Zeller)

Fairfax (USNM).

16 April to 27 June.

Host Plants: Asteraceae: Euthamia graminifolia (L.)

Nutt. and Solidago sp.

Epiblema infelix Heinrich

Giles (USNM).

14-21 June.

Host Plants: Probably Asteraceae.

Epiblema numerosana (Zeller)

Fairfax (USNM).

7 July.

Host Plants: Probably Asteraceae.

Epiblema obfuscana (Dyar)

Rockbridge (EME).

2 June.

Host Plants: Asteraceae: Solidago sp.

Epiblema otiosana (Clemens)

[bidens borer]

Fairfax (EMDB, USNM), Hanover (USNM), New Kent (USNM) *Suffolk* (USNM), *Virginia Beach* (USNM), Westmoreland (USNM).

24 May to 29 August.

Host Plants: Asteraceae: *Ambrosia* sp., *Bidens* sp., *B. cernua* L., and *B. frondosa* L. Polygonaceae: *Polygonum* sp.

Epiblema scudderiana (Clemens)

Fairfax (USNM).

15 April to 15 May.

Host Plants: Asteraceae (4).

Epiblema strenuana (Walker)

[ragweed borer]

Arlington (USNM), Caroline (USNM), Fairfax (USNM), Goochland (EME), Virginia Beach (USNM).

15 April to 27 August.

Host Plants: Asteraceae (4) and Chenopodiaceae (1).

Epiblema tripartitana (Zeller)

Fairfax (USNM).

20 May.

Host Plants: Probably Asteraceae.

Epinotia heucherana Heinrich

Arlington (USNM).

8 June.

Host Plants: Saxifragaceae: Heuchera americana L.

Epinotia lindana (Fernald)

Floyd (USNM), Grayson (USNM), Montgomery (USNM), Smyth (USNM).

27 September to 9 October.

Host Plants: Betulaceae (1) and Cornaceae (1), with most records from the latter family.

Epinotia nanana (Treitschke) [green spruce leafminer]

Fairfax (USNM).

19-23 April.

Host Plants: Pinaceae (1).

Epinotia radicana (Heinrich)

Smyth (USNM).

2 September.

Host Plants: Cupressaceae (2) and Pinaceae (5).

Epinotia septemberana Kearfott

Bath (USNM), Floyd (USNM).

20-27 September.

Host Plants: Ericaceae: *Rhododendron* sp. and *R. canadense* (L.) Torr. Pinaceae: *Picea mariana* (Mill.) Britton et al.

Epinotia walkerana (Kearfott)

Arlington (EMDB), Fairfax (USNM).

27 May to 12 June.

Host Plants: Betulaceae: Corylus sp. and C. americana

Marshall.

Eucosma agricolana (Walsingham)

Fairfax (EMDB, USNM).

28 May to 2 July.

Host Plants: Asteraceae: Artemisia sp. and A. vulgaris

L.

Eucosma albiguttana (Zeller)

Hampton (USNM), Virginia Beach (USNM).

9 February (possibly reared) to 20 July.

Host Plants: Unknown.

Eucosma cataclystiana (Walker)

Fairfax (EME, USNM).

30 May to 4 September.

Host Plants: Asteraceae: Ambrosia sp. and Solidago sp.

Eucosma cocana Kearfott

[shortleaf pine cone borer]

Hanover (USNM), King and Queen (USNM, VT), Montgomery (VT), Virginia Beach (USNM, VT).

23 April to 11 May.

Host Plants: Pinaceae: Pinus taeda L.

Eucosma derelicta Heinrich

Bath (USNM), Fairfax (USNM), Floyd (USNM), Giles (Milne & Milne, 1944), Northumberland (USNM).

21 July to 13 September (8 July; Milne & Milne, 1944).

Host Plants: Asteraceae: Solidago sp.

Eucosma dorsisignatana (Clemens)

Bath (USNM), Dinwiddie (USNM), Fairfax (EMDB, USNM), Franklin (USNM), Halifax (USNM), Hanover (USNM), Russell (USNM).

17 August to 24 October

Host Plants: Asteraceae: Solidago sp., S. canadensis L., and S. sempervirens L.

Eucosma fraudabilis Heinrich

Nottoway (USNM), Page (USNM).

6–15 July.

Host Plants: Unknown.

Eucosma giganteana (Riley)

Franklin (USNM).

8 August.

Host Plants: Asteraceae: Silphium perfoliatum L.

Eucosma gloriola Heinrich

[eastern pine shoot borer]

Fauquier (USNM), Hanover (USNM).

28 March to 24 April.

Host Plants: Pinaceae (3).

Eucosma gomonana Kearfott

Arlington (USNM), Fairfax (USNM).

16 April to 4 May.

Host Plants: Unknown.

Eucosma monitorana Heinrich

Fairfax (USNM).

28 May to 12 July.

Host Plants: Pinaceae: Pinus sp., P. resinosa Aiton, and

P. virginiana Mill.

Eucosma oraria Wright

Accomack (USNM), Northampton (USNM).

23 September to 6 October.

Host Plants: Unknown.

Eucosma quinquemaculana (Robinson)

Virginia Beach (USNM).

8 September to 6 October.

Host Plants: Unknown.

Eucosma robinsonana (Grote)

Isle of Wight (USNM), Nottoway (USNM), Suffolk (USNM).

8 June to 16 September.

Host Plants: Unknown.

Eucosma similiana (Clemens)

Bath (USNM).

10 August.

Host Plants: Asteraceae: Solidago sp.

Eucosma sombreana Kearfott

Montgomery (USNM).

31 August.

Host Plants: Asteraceae: Helianthus sp., H. decapetalus

L., H. giganteus L., and H. tuberosus L.

Eucosma tocullionana Heinrich

[white pine cone borer]

Albemarle (USNM), Fairfax (EMDB, USNM), Orange (USNM), Page (EMDB), Washington (USNM).

7 May to 20 July.

Host Plants: Pinaceae (4).

Eucosma vagana McDunnough

Fairfax (USNM).

11 July.

Host Plants: Asteraceae: Solidago sp.

Eucosma wandana Kearfott

Fairfax (USNM).

28 July.

Host Plants: Unknown; possibly Asteraceae.

Eucosma n. sp.

Montgomery (USNM).

6 August.

Host Plants: Unknown.

Gretchena amatana Heinrich

Bath (USNM), Fairfax (USNM), Floyd (USNM). 15 April to 27 May.

Host Plants: Possibly Juglandaceae.

Gretchena bolliana (Slingerland)

[pecan bud moth]

Chesapeake (USNM), Loudoun (USNM), Virginia Beach (USNM).

21 May to 10 June (emergence dates, not field captures).

Host Plants: Juglandaceae: Carya sp., C. aquatica (F. Michx.) Nutt., C. illinioensis (Wagnerh.) K. Koch., Juglans sp., and J. cinerea L.

Gretchena concitatricana (Heinrich)

Bath (USNM), Fairfax (USNM).

21 April to 3 June.

Host Plants: Juglandaceae: Juglans nigra L.

Gretchena delicatana Heinrich

Fairfax (USNM).

16 June.

Host Plants: Unknown.

Gretchena deludana (Clemens)

Bath (USNM), Chesterfield (USNM), Fairfax (USNM), Rockingham (USNM).

25 April to 25 May.

Host Plants: Unknown.

Gretchena nymphana Blanchard & Knudson

Caroline (USNM), Fairfax (USNM).

14 April to 10 May. Host Plants: Unknown.

Gretchena watchungana (Kearfott)

Fairfax (USNM), Rockbridge (Wagner et al., 1995).

23-30 April.

Host Plants: Betulaceae: Alnus sp. Fagaceae: Quercus

sp

Gypsonoma salicicolana (Clemens)

Fairfax (USNM).

17 July.

Host Plants: Salicaeae: Salix spp.

Notocelia trimaculana (Haworth)

Dickenson (USNM), Fairfax (USNM), Montgomery (USNM), Patrick (EME), Rockingham (USNM).

30 April to 23 June.

Host Plants: Rosaceae: Crataegus sp., Prunus spinosa

L., and Pyrus communis L.

Pelochrista milleri Wright

Fairfax (USNM).

10 August.

Host Plants: Unknown.

Pelochrista pallidipalpana (Kearfott)

Hampton (USNM), Virginia Beach (USNM).

19-20 July.

Host Plants: Unknown.

Pelochrista womonana (Kearfott)

Arlington (USNM).

January (emergence dates, not field captures).

Host Plants: Asteraceae: Cynara sp., Helianthus sp.,

H. annuus L., and H. divaricatus.

Pelochrista zomonana (Kearfott)

Fairfax (USNM).

12 June to 26 July.

Host Plants: Asteraceae: Chrysanthemum sp.

Phaneta ambodaidaleia Miller

Fairfax (USNM).

20 March to 6 April.

Host Plants: Unknown.

Phaneta autumnana (McDunnough)

Fairfax (USNM).

23 September to 1 October.

Host Plants: Unknown.

Phaneta awemeana (Kearfott)

Smyth (USNM).

22 May.

Host Plants: Unknown.

Phaneta ferruginana (Fernald)

Fairfax (USNM). 1–2 May.

Host Plants: Unknown.

Phaneta formosana (Clemens)

"Virginia" (USNM).

1 June.

Host Plants: Asteraceae: Solidago sp.

Phaneta kiscana (Kearfott)

Fairfax (USNM).

28 May.

Host Plants: Unknown.

Phaneta ochrocephala (Walsingham)

Fairfax (USNM).

27 August to 4 September.

Host Plants: Asteraceae: Xanthium sp. and

X. strumarium L.

Phaneta ochroterminana (Kearfott)

Fairfax (USNM).

4-17 September.

Host Plants: Asteraceae: Aster sp. and Solidago sp.

Phaneta parmatana (Clemens)

Fairfax (USNM).

15 May to 24 September.

Host Plants: Asteraceae: Aster sp. and Symphyotrichum

ciliolatum (Lindl.) A. Love & D. Love.

Phaneta radiatana (Walsingham)

Arlington (USNM).

4 June.

Host Plants: Asteraceae: Solidago sp.

Phaneta raracana (Kearfott)

Fairfax (USNM).

10 August to 11 September.

Host Plants: Asteraceae: Solidago sp.

Phaneta striatana (Clemens)

"Virginia" (USNM).

No capture data.

Host Plants: Unknown.

Phaneta tomonana (Kearfott)

Fairfax (USNM).

4 September.

Host Plants: Asteraceae: Aster sp.

Phaneta umbrastriana (Kearfott)

Fairfax (USNM), Floyd (USNM).

8-31 May.

Host Plants: Asteraceae: Solidago sp.

Phaneta verna Miller

Fairfax (USNM).

18-27 April.

Host Plants: Unknown.

Proteoteras aesculana Riley

[maple twigborer]

Fairfax (USNM), Virginia Beach (USNM).

6 April to 9 November.

Host Plants: Aceraceae: Acer sp. and A. negundo L.

Sapindaceae: Aesculus sp. and A. hippocastanum L.

Proteoteras crescentana Kearfott

Fairfax (USNM).

20 June to 12 July.

Host Plants: Aceraceae: Acer negundo L.

Proteoteras moffatiana Fernald

Madison (SNPC), Montgomery (USNM), Smyth

(USNM).

12 July to 31 August.

Host Plants: Aceraceae: Acer rubrum L. and A.

saccharinum L. Caprifoliaceae: Sambucus s

Rosaceae: Rosa sp.

Proteoteras willingana (Kearfott)

[boxelder twig borer]

Fairfax (USNM).

20 June.

Host Plants: Aceraceae: Acer sp. and A. negundo L.

Pseudexentera costomaculana (Clemens)

Henry (USNM), Rockingham (USNM), Smyth

(USNM).

3 May to 17 July (mostly May).

Host Plants: Hamamelidaceae: Hamamelis sp.

Pseudexentera cressoniana (Clemens)

Caroline (USNM), Fairfax (EME, USNM), Prince

William (USNM).

31 March to 19 April.

Host Plants: Juglandaceae: Carya sp.

Pseudexentera faracana (Kearfott)

Fairfax (EMDB, USNM).

10 February to 9 April.

Host Plants: Fagaceae: Castanea sp.

Pseudexentera haracana (Kearfott)

Rockbridge (Wagner et al., 1995).

Larval collections.

Host Plants: Fagaceae: Quercus sp. and Castanea sp.

Pseudexentera hodsoni Miller

Rockbridge (Wagner et al., 1995).

Larval collections.

Host Plants: Fagaceae: Quercus sp.

Pseudexentera mali Freeman

[pale apple leafroller]

Fairfax (USNM).

6-19 April.

Host Plants: Rosaceae: *Crataegus* sp., *Malus coronaria* (L.) Mill., *M. coronaria* (L.) Mill., *Pyrus* sp., and *P. communis* L.

Pseudexentera spoliana (Clemens)

Fairfax (EMDB, USNM), Rockbridge (Wagner et al., 1995).

19-25 April.

Host Plants: Aceraceae: *Acer* sp. Fagaceae: *Castanea* sp. and *Quercus* sp.

Pseudexentera vaccinii Miller

Rockbridge (Wagner et al., 1995).

Larval collections.

Host Plants: Ericaceae: Vaccinium sp.

Pseudexentera virginiana (Clemens)

Fairfax (USNM).

2 April.

Host Plants: Unknown.

Pseudexentera n. sp.

Rockbridge (Wagner et al., 1995).

Larval collections.

Host Plants: Fagaceae: Quercus sp.

Retinia comstockiana Fernald

[pitch twig moth]
Arlington (USNM), Caroline (USNM), Fairfax

(USNM). 1–18 June.

Host Plants: Pinaceae: *Pinus banksiana* Lamb., *P. resinosa* Aiton, *P. rigida* Mill., *P. sylvestris* L., and *P. taeda* L.

Retinia gemistrigulana (Kearfott)

Caroline (USNM), Chesterfield (USNM), Fairfax (USNM), King and Queen (USNM), Pulaski (USNM), *Virginia Beach* (USNM).

11 May to 7 June.

Host Plants: Presumably Pinaceae or Cupressaceae.

Retinia virginiana (Busck)

Botetourt (USNM), Craig (USNM), Fairfax (USNM), Floyd (USNM), Hanover (USNM), Isle of Wight (USNM), James City (USNM), Montgomery (USNM).

20 April to 17 May.

Host Plants: Pinaceae: Pinus virginiana Mill.

Rhopobota dietziana (Kearfott)

Caroline (USNM), Fairfax (USNM).

2 April to 25 July.

Host Plants: Aquifoliaceae: *Ilex* sp. and *I. verticillata* (L.) A. Gray.

Rhopobota finitimana (Heinrich)

Caroline (USNM), Fairfax (USNM), *Suffolk* (USNM). 4 April to 20 July.

Host Plants: Aquifoliaceae: *Ilex* sp., *I. mucronatus* (L.) M. Powell et al., and *I. verticillata* (L.) A. Gray. Salicaceae: *Populus balsamifera* L.

Rhyacionia busckana Heinrich

Arlington (USNM).

21 March to 30 May.

Host Plants: Pinaceae: *Pinus banksiana* Lamb., *P. ponderosa* C. Lawson, *P. resinosa* Aiton, and *P. sylvestris* L.

Rhyacionia frustrana (Scudder)

[Nantucket pine tip moth]

Arlington (USNM), *Chesapeake* (USNM), Fairfax (EMDB, USNM), Hanover (VT), Henrico (USNM), King William (USNM, VT), Mathews (USNM), Northumberland (USNM), Southampton (VT), *Virginia Beach* (USNM).

6 January to 31 December (field captures mostly May to July; laboratory emergences in other months).

Host Plants: Pinaceae: Pinus spp.

Rhyacionia rigidana (Fernald)

[pitch pine tip moth]

Augusta (USNM), Fairfax (EMDB, USNM), Hanover (USNM), King and Queen (USNM, VT).

28 February to 14 July.

Host Plants: Pinaceae: Pinus spp.

Sonia canadana McDunnough

Fairfax (USNM), Smyth (USNM).

20 June to 26 July.

Host Plants: Aceraceae: *Acer* sp. Asteraceae: *Aster* sp., *Solidago* sp., and *Symphyotrichum novae-angeliae* (L.) G. L. Nesom.

Sonia constrictana (Zeller)

 $Fairfax \ (USNM), \ \textit{Virginia Beach} \ (USNM).$

23 June to 25 July. Host Plants: Unknown.

Sonia paraplesiana Blanchard

Suffolk (USNM).

31 August.

Host Plants: Unknown.

Spilonota ocellana [Denis and Schiffermüller] [eyespotted bud moth]

Fairfax (USNM).

19 April to 21 May.

Host Plants: Anacardiaceae (1), Betulaceae (3), Elaeagnaceae (1), Ericaceae (1), Euphorbiaceae (1), Fagaceae (1), Juglandaceae (1), Myricaceae (1), Pinaceae (1), Polygonaceae (1), Rosaceae (9), and Salicaceae (1).

Strepsicrates smithiana (Walsingham)

Chesapeake (USNM), Hampton (USNM), Isle of Wight (USNM), Virginia Beach (USNM).

24 March to 10 August.

Host Plants: Myricaceae (2) and Myrtaceae (2).

Zeiraphera claypoleana (Riley)

Fairfax (USNM).

27 May.

Host Plants: Sapindaceae: Aesculus glabra Willd.

Zeiraphera improbana (Walker)

Fairfax (USNM).

7 July.

Host plants: Juglandaceae (1), Pinaceae (3), and Salicaceae (1).

OLETHREUTINAE: GRAPHOLITINI

Corticivora clarki Clarke

Fairfax (EME, USNM).

27-28 June.

Host plants: Unknown.

Cydia caryana (Fitch)

[hickory shuckworm]

Arlington (USNM), Fairfax (USNM), Virginia Beach (USNM).

10 June to 27 July.

Host Plants: Juglandaceae: *Carya* sp., *C. illinoiensis* (Wagenh.) K. Koch, *C. ovata* (Mill.) K. Koch, and *Juglans nigra* L.

Cydia grandicula (Heinrich)

Giles (USNM).

14-21 June.

Host Plants: Unknown.

Cydia latiferreana (Walsingham)

[filbertworm]

Bath (USNM), Bedford (USNM), Caroline (USNM), Chesterfield (USNM), Fairfax (EME, USNM), Fauquier (USNM), Floyd (USNM), Franklin (USNM), Giles (Milne & Milne, 1944), Hanover (USNM), Isle of Wight (USNM), Montgomery (USNM), Northumberland (USNM), Page (EME), Patrick (USNM), Russell (USNM), Surry (USNM), Virginia Beach (USNM).

11 May to 11 October.

Host Plants: Betulaceae (1), Fagaceae (3), Juglandaceae (1), Proteaceae (1), Punicaceae (1), and Rosaceae (1).

Cydia pomonella (L.)

[codling moth]

Accomack (USNM), Albemarle (VT), Fairfax (EME, USNM), Isle of Wight (VT), Tazewell (Stein, 1993). 18 April to 12 November.

Host plants: Fagaceae (1), Juglandaceae (1), Moraceae (1), Proteaceae (1), Rosaceae (5), and Rutaceae (1).

Cydia toreuta (Grote)

[eastern pine seedworm]

Accomack (USNM), Fairfax (EME, USNM), Rockbridge (USNM), Southampton (USNM), Suffolk (USNM), Virginia Beach (USNM).

15 May to 2 July.

Host Plants: Pinaceae: *Pinus banksiana* Lam., *P. resinosa* Aiton, and *P. virginiana* Mill.

Cydia n. sp. 1

Fairfax (USNM).

16 April.

Host Plants: Unknown.

Cydia n. sp. 2

Fairfax (USNM).

2 May.

Host Plants: Unknown.

Dichrorampha incanana (Clemens)

Fairfax (USNM).

6 June.

Host Plants: Unknown.

Dichrorampha leopardana (Busck)

Fairfax (USNM).

1 August (emergence date of reared specimens).

Host Plants: Asteraceae: Verbesina sp. and Ageratina sp.

Dichrorampha simulana (Clemens)

Fairfax (EMDB), Montgomery (USNM).

30 May to 30 June.

Host Plants: Possibly Asteraceae.

Ecdytolopha insiticiana Zeller

[locust twig borer]

Accomack (USNM), Alleghany (USNM), Arlington (USNM), Bath (Skinner, 1921; USNM), Botetourt (USNM), Caroline (USNM), Charles City (USNM), Dickenson (USNM), Fairfax (EMDB, USNM), Floyd (USNM), Giles (Milne & Milne, 1944), Hanover (USNM), King William (VT), Montgomery (EMDB, USNM), Prince William (USNM), Richmond (USNM), Roanoke (VT), Wise (USNM).

21 April to 23 August.

Host Plants: Fabaceae: *Robinia* sp., *R. pseudoacacia* L., and *Wisteria* sp.

Ecdytolopha mana (Kearfott)

Fairfax (USNM).

15 May.

Host Plants: Ulmaceae: Celtis sp.

Grapholita eclipsana (Zeller)

Fairfax (EMDB, USNM), Giles (USNM).

18 April to 12 May, with a single record from 14 August.

Host Plants: Fabaceae: Amorpha canescens Pursh.

Grapholita interstinctana (Clemens)

[clover head caterpillar]

Bath (Skinner, 1921), Fairfax (USNM), Montgomery (VT).

14 April to 10 May.

Host Plants: Fabaceae: *Trifolium* sp. and *Trifolium* incarnatum L.

Grapholita molesta (Busck)

[oriental fruit moth]

Arlington (USNM), Charlotte (USNM), Fairfax (USNM).

21 May to 16 September.

Host Plants: Ebenaceae (1), Myrtaceae (2), Rosaceae (10), and Sapindaceae (1).

Grapholita packardi (Zeller)

[cherry fruitworm]

Arlington (USNM), Fairfax (EME, USNM), Virginia

Beach (USNM).

19 April to 3 September.

Host Plants: Rosaceae (6) and Ericaceae (1).

Grapholita prunivora (Walsh)

[lesser appleworm]

Arlington (USNM), Fairfax (USNM).

12 May to 3 September.

Host Plants: Rosaceae (6); occasionally in galls of aphids or fungus.

Gymnandrosoma punctidiscanum Dyar

Bath (USNM), Caroline (USNM), Fairfax (EMDB, USNM), Floyd (USNM), Giles (USNM), Hanover (USNM), Isle of Wight (USNM), Lancaster (USNM), *Virginia Beach* (USNM).

12 May to 1 September.

Host Plants: Fabaceae: Robinia sp.

Larisa subsolana Miller

Fairfax (USNM), Suffolk (USNM), Virginia Beach (USNM).

29 April to 23 July.

Host Plants: Aquifoliaceae: *Ilex mucronatus* (L.) M. Powell et al. Juglandaceae: *Carya* sp. and *C. illinoiensis* (Wagenh.) K. Koch.

Pammene perstructana (Walker)

Washington (USNM).

7 May.

Host Plants: Unknown.

Pseudogalleria inimicella (Zeller)

Giles (Milne & Milne, 1944), *Virginia Beach* (USNM).

22 May (8 July; Milne & Milne, 1944).

Host Plants: Smilacaceae: Smilax sp. and S. herbacea L.

Satronia tantilla Heinrich

Fairfax (EME, USNM).

21 April to 26 June.

Host Plants: Unknown.

Sereda tautana (Clemens)

Fairfax (USNM), Rockbridge (Wagner et al., 1995). 10–20 April.

Host Plants: Fagaceae: Quercus spp.

Talponia plummeriana (Busck)

Fairfax (USNM).

18 April to 23 May.

Host Plants: Annonaceae: Asimina triloba (L.).

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Choristoneura rosaceana (Harris), the obliquebanded leafroller.

Appendix 1. Number of records per month for each species; numbers in italics refer to laboratory emergences; += species with capture dates unknown; *= species known from larval collections only.

Tribe/species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TORTRICINI						_			_			
Acleris cervinana	1		1	2						5	2	
Acleris chalybeana				6			1			1		
Acleris curvalana					6	14	1					
Acleris ferrugana		1			1		1			1		
Acleris flavivittana		1	7	5					1		1	2
Acleris forbesana			1									1
Acleris hastiana		2		1								
Acleris hudsoniana						1						
Acleris kearfottana		3									1	1
Acleris logiana placidana				2			1			1		
Acleris maccana				2						1		
Acleris macdunnoughi									2			
Acleris maculidorsana		1	1			2	1					
Acleris minuta					6							
Acleris negundana		1	1		9	3	3					1
Acleris nigrolinea			İ				ت ا	2				
Acleris robinsonana		2					1					
Acleris schalleriana virburnana		5	1		1	15	7	7		1	1	2
Acleris semiannula		1				10	,					
Acleris semipurpurana		1			53	51	4					
Acleris simpliciana					2	31						
Acleris subnivana*												
Acleris variana									1			
Acleris n. sp. 1							1					
Acleris n. sp. 2										1		
CNEPHASIINI										1		
Decodes basiplaganus									5			
ARCHIPINI												
Adoxophyes furcatana					1	1		1				
Archips argyrospila					1	2	6	1				
Archips cerasivorana							2					
Archips fervidana						6, 9	8, 13	2				
Archips grisea					2	5	1					
Archips magnoliana							1					
Archips nigriplagana						1	1					
Archips purpurana						2	4					
Archips rileyana							11					
Archips semiferana						1	3					
Argyrotaenia alisellana					60	27	1					
Argyrotaenia floridana					00	6	3		2			
Argyrotaenia juglandana						4	3		1			
Argyrotaenia mariana				5	18	1	1		1			
Argyrotaenia occultana				1	10	1	1					
Argyrotaenia pinatubaba				2	1	2	4					
Argyrotaenia quercifoliana					20	47	5	2	1			
					6	4/	3		1			
Argyrotaenia tabulana	1		11	22 1		20 1	20. 1	14 4	1.4			
Argyrotaenia velutinana	1		11	32, 1	11	30, 1	29, 1	14, 4	14			
Choristoneura fractivittana					25	2	1					
Choristoneura fumiferana Choristoneura obsoletana					1, 4	14	1	16, 2	16			

Tribe/species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
ARCHIPINI (continued)												
Choristoneura parallela					10	12	9	5	4			
Choristoneura pinus						6	2	1				
Choristoneura rosaceana					70	64, <i>1</i>	56	44, 1	34	2		
Clepsis clemensiana						-	1	1				
Clepsis melaleucana					37	15	1					
Clepsis peritana				10	37	62	37	56	52	9		
Clepsis persicana						10						
Clepsis virescana					4	6	11	10	14			
Cudonigera houstonana							1					
Lozotaenia exomilana							1					
Pandemis lamprosana					6	5	1	1	1			
Pandemis limitata					11	16	2	9, 2	30			
Syndeniis afflictana				16	6							
Xenotemna pallorana					8	8		2				
SPARGANOTHINI												
Amorbia lumerosana			1	7	52	47	1					
Coelostathma discopunctana				<u> </u>	12	12	2	10	2			
Coelostathma n. sp.					1							
Niasoma metallicana								1				
Platynota exasperatana					1	2		3	1			
Platynota flavedana					11	9	15	5	9, 1			
Platynota idaeusalis					13	14	18	15	6			
Platynota rostrana						6		2	1			
Platynota stultana				3					3	6	5	
Sparganothis (Cenopis)												
albicaudana*												
Sparganothis (Cenopis) cana						1						
Sparganothis (Cenopis) diluticostana						6	1					
Sparganothis (Cenopis) directana						1	4	1				
Sparganothis (Cenopis) lamberti						1	-	1				
Sparganothis (Cenopis) petitana					1	2		1				
Sparganothis (Cenopis) reticulatana					2	1	9	12	3			
Sparganothis (Cenopis) saracana						1	1	12				
Sparganothis (Cenopis) n. sp.							1					
Sparganothis (S.) bistriata							7		1			
Sparganothis (S.) distincta						5, 3	,	10, 1	1			
Sparganothis (S.) sulfureana					1	11	11	11, 1	21, 3	10		
Sparganothis (S.) tristriata						11	11	2	21,3	10		
Sparganothis (S.) unifasciana						4	1					
Sparganothis (S.) violaceana						2	1					
Sparganothis (S.) xanthoides						2	4	3				
Sparganothoides lentiginosana						10	1	8	25	1		
EULINI						10	1	0	23	1		
Anopina ednana							8	5				
Enlia ministrana						11	0					
COCHYLINI	1	<u> </u>				11						+
Aethes angustana					1, 1				24	1		-
Aethes argentilimitana					3		2		1	1		
Aethes atomosana		 			3				1			
Aethes floccosana						3			1			
Aethes interruptofasciata		-			1	3						
	1				1				2			
Aethes promptana	-	-				1						-
Aethes sexdentata	1					1				<u> </u>	<u> </u>	

Tribe/species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
COCHYLINI (continued)												
Aethes n. sp. 1						1		3				
Aethes n. sp. 2					2	1	4	1				
Carolella bimaculana									1			
Carolella sartana						1	2	1				
"Cochylis" aurorana									2			
"Cochylis" hoffmanana				2	3		1	1				
"Cochylis" oenotherana									1			
"Cochylis" temerana				4								
Henricus contrastana						4						
Phalonidia lepidana					2							
Phtheochroa riscana						1		4				
Phtheochroa terminana						2		10	8			
Platphalonidia nr. felix							1	2				
Rudenia leguminana					1			1				
Thyraylia n. sp. +												
BACTRINI												
Bactra furfurana						6	9	4				
Bactra maiorina						2	3					
Bactra verutana						2	2	3	4	1	2	
Endothenia hebesana	5			2	9	31	35	10, 3	3			
Endothenia montanana						1						
Endothenia nubilana								1	1			
Hulda impudens					1	10	12	5	3			
OLETHREUTINI												
Celypha cespitana					6	8	16	6	19			
Episimus argutanus					4, 2	8, 3	11	8	1			
Episimus tyrius					6	3	4					
Eumarozia malachitana						2	3	10	8, 2	3		
Hedya chionosema				1	1		1		-,			
Hedya cyanana					1, 1		1	1				
Hedya ochroleucana					_,_	1						
Metendothenia separatana								1				
Olethreutes appendiceum					4	5	1	-				
Olethreutes astrologana					8	6	-					
Olethreutes atrodentata*												
Olethreutes auricapitana						1						
Olethreutes bipartitana					1	1		1				
Olethreutes brunneopurpurata							1	2				
Olethreutes concinnana						3	3	2				
Olethreutes coruscana					12	6						
Olethreutes corylana					1	U						
Olethreutes fasciatana					15	71	11					
Olethreutes ferriferana					2	1, 3	11					\vdash
Olethreutes ferrolineana					1	1, 3						
Olethreutes footiana					1	1						-
Olethreutes glaciana						1						<u> </u>
Olethreutes griseoablana						8			1			
Olethreutes hamameliana					1	3			1			
					1	3	3	1				-
Olethreutes inormatana					1		3	1				-
Olethreutes lacunana*							1					-
Olethreutes merrickanum					1		1					
Olethreutes monetiferana Olethreutes nitidana					1		1					-

Tribe/species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
OLETHREUTINI (continued)					·							
Olethreutes olivaceana					3				1			
Olethreutes osmundana							1					
Olethreutes permundana						4	4	3				
Olethreutes troglodana						1						
Orthotaenia undulana						13						
Paralohesia liriodendrana					3	1, 9		3				
Paralobesia piceana									1			
Paralobesia rhoifructana					8		1	1				
Paralohesia spiraeifoliana				1	1							
Paralohesia viteana					1	1	1	1				
Paralobesia yaracana						1	1					
Phaecasiophora confixana					2	10	3	5				
Phaecasiophora niveiguttana					1	26	3	5				
Pristerognatha agilana					3							
Zomaria interruptolineana				3	2		1	1	1			
ENARMONIINI									<u> </u>			
Ancylis burgessiana					1	1						
Ancylis carbonana					1	2						
Ancylis comptana				5			2	1				
Ancylis discigerana					2	1						
Ancylis divisana					3	3	4, 2	6	1			
Ancylis fuscociliana					5	1	., 2					
Ancylis geminana					1	1						
Ancylis goodelliana					1	1						
Ancylis laciniana					22	5						
Ancylis metamelana					1	1	2		1			
Ancylis muricana					1	1	1					
Ancylis nubeculana					2							
Ancylis platauana				1	7				1			
Ancylis semiovana				1	,	1			1			
Ancylis subaequana						5						
EUCOSMINI												
Catastega aceriella						2	1					
Catastega timidella						1	1					
Chimoptesis gerulae		1				1						
Chimoptesis pennsylvaniana*		1										
Epiblema boxcana					3							
Epiblema brightonana					3	1	1	1				
Epiblema carolinana						1	1	2				
Epiblema desertana				1	2	1						
Epiblema infelix				1		2						
Epiblema numerosana							2					
Epiblema obfuscana						1						
Epiblema otiosana					1	3	2	4			-	
				2	1	3		4				
Epiblema scudderiana				3	1 17	13	1	A 1				
Epiblema strenuana				3		13	1	4, 1				
Epiblema tripartitana					1	1						
Epinotia heucherana						1			1	2		
Epinotia lindana									1	3		
Epinotia nanana				3					7		-	
Epinotia radicana									7			
Epinotia septemberana					1	4			2			
Epinotia walkerana					1	1						

Tribe/species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
EUCOSMINI (continued)												
Eucosma agricolana					1	5	1					
Eucosma albiguttana		1					7					
Eucosma cataclystiana					1	5	7	7	1			
Eucosma cocana				2	7							
Eucosma derelicta								8	2			
Eucosma dorsisignatana								1	19	16		
Eucosma fraudabilis							2					
Eucosma giganteana								1				
Eucosma gloriola			1	1								
Eucosma gomonana				1	2							
Eucosma monitorana					1	1	1					
Eucosma oraria									1	4		
Eucosma quinquemaculana									4	1		
Eucosma robinsonana						2			2			
Eucosma similiana								1				
Eucosma sombreana								1				
Eucosma tocullionana					3		5, 3	1				
Eucosma vagana					3		1					
Eucosma wandana							1					
Eucosma n. sp.							1	2				
Gretchena amatana				2	4							
Gretchena bolliana					1	2	1				2	
Gretchena concitatricana				1	2	2	1					
				1	2	1						
Gretchena delicatana					10	1						
Gretchena deludana				6	12							
Gretchena nymphana				2	1							
Gretchena watchungana				3								
Gypsonoma salicicolana					1.0		1					
Notocelia trimaculana				1	10	8						
Pelochrista milleri								1				
Pelochrista pallidipalpana							5					
Pelochrista womonana	2											
Pelochrista zomonana						2	1					
Phaneta ambodaidaleia			1	1								
Phaneta autumnana									3	2		
Phaneta awemeana					3							
Phaneta ferruginana					2							
Phaneta formosana						2						
Phaneta kiscana					3							
Phaneta ochrocephala								2	3			
Phaneta ochroterminana									2			
Phaneta parmatana					1	1		5	18			
Phaneta radiatana						1						
Phaneta raracana								3	9			
Phaneta striatana +												
Phaneta tomonana									1			
Phaneta umbrastriana					4							
Phaneta verna				5								
Proteoteras aesculana				1		2	8	2			1	
Proteoteras crescentana						1	1				_	
Proteoteras moffatiana						1	2	2				
Proteoteras willingana						1						

Tribe/species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
EUCOSMINI (continued)												
Pseudexentera costomaculana					4		1					
Pseudexentera cressoniana			1	3								
Pseudexentera faracana		2		4								
Pseudexentera haracana*												
Pseudexentera hodsoni*												
Pseudexentera mali				4								
Pseudexentera spoliana				3	6							
Pseudexentera vaccinii*												
Pseudexentera virginiana				1								
Pseudexentera n. sp.*												
Retinia comstockiana						1, 2						
Retinia gemistrigulana					7	14						
Retinia virginiana				2,4	4, 1							
Rhopobota dietziana				2	1		2					
Rhopobota finitimana				2, 5	-		2					
Rhyacionia busckana			8	_, -, -	3							
Rhyacionia frustrana	3	10	23	3, 47	13	46, <i>1</i>	36	2			5	7
Rhyacionia rigidana		1	1	12	10	3	4					t
Sonia canadana				12		2	2					
Sonia constrictana						1	2					
Sonia paraplesiana						-		1				
Spilonota ocellana				1	3			1				
Strepsicrates smithiana			1	1		1, 8	15, <i>1</i>	4				
Zeiraphera claypoleana			1		1	1,0	13, 1					
Zeiraphera improbana					1		1					
GRAPHOLITINI							1					
Corticivora clarki						2						
Cydia caryana				1	3	3	1, 1	1				
Cydia grandicula				1	3	1	1, 1	1				
					3	1	11, 7	36	33	1		_
Cydia latiferreana	2			5	10	9	16	5	33	1 1	1	
Cydia pounonella				4	6	9	5	1		1	1	
Cydia toreuta					0	9	3	1				
Cydia n. sp. 1				1	1							
Cydia n. sp. 2					1	1						
Dichrorampha incanana						1						
Dichrorampha leopardana					1	4		2				
Dichrorampha simulana	,				1 22 1	4	16.07	0.12				
Ecdytolopha insiticiana	1			7	32, 1	22, 11	16, 27	8, 13				
Ecdytolopha mana					1			1				
Grapholita eclipsana			-	6	2			1				
Grapholita interstinctana			-	2	1 25			1 12	_			
Grapholita molesta			-	1	1, 25	1	1, 7	1, 12	2	1		<u> </u>
Grapholita packardi				1	1	4, 1	1		2, 4			
Grapholita prunivora	1				1		-		1			
Gymnandrosoma punctidiscanum					5	9	6	11	1			
Larisa subsolana				1		17	4					
Pammene perstructana					1							<u> </u>
Pseudogalleria inimicella					1							
Satronia tantilla				1		1						<u> </u>
Sereda tantana				3								<u> </u>
Talponia plummeriana				1	9					<u></u>	<u></u>	L